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City of Birmingham.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1925.

BIRMINGHAM:
Templar Printing Works, Edmund Street.

1926.

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Public Health Department,
The Council House,
Birmingham.

June, 1926.

TO THE CHAIRMAN AND MEMBERS OF THE PUBLIC HEALTH COMMITTEE.

Ladies and Gentlemen,

The health of the citizens of Birmingham was relatively very good during the year 1925. The general death-rate was 11.7 per 1,000, the infant mortality rate was 78 per 1,000 births, and the number of new cases of Tuberculosis was about half of what it was ten years ago. The incidence of communicable diseases generally was not excessive.

During the past few years financial stringency has (I think, quite properly), prevented much work being undertaken which would have helped the Public Health Department. It seems to me right that people should know that this is the case, not only in regard to the expenditure of the Public Health Committee but in that of other Committees having ancillary health functions.

It will be seen from page 37 that a very large number of new houses were built and occupied during the year. There is, however, still a great shortage of dwelling houses, particularly those for people with small incomes.

The report shows the result of two enquiries which were made into the question of overcrowding. That in regard to a small portion of St. Mary's Ward showed that no less than 25 per cent. of the dwelling houses were overcrowded, the standard of overcrowding taken being—

> That more than four persons occupied a bedroom, or that persons of opposite sexes over 13 years of age had to occupy the same bedroom.

When it is realised that many of these bedrooms in the back to back houses in Birmingham are small, it will be evident how very harmful and insanitary are the conditions under which a considerable number of the unskilled labouring classes are now living. A suggestion is put forward for the erection of houses of two rooms, to be let furnished for small families as a temporary measure until the overcrowding has been reduced, when two of these small houses might be combined into a good four-roomed family cottage.

The year 1925 may be considered as the Jubilee year of Public Health effort. It was in 1875 that the Public Health Act became law, which set up our present organisations for the prevention of disease. It may, therefore, be useful to indicate briefly what has been accomplished in Birmingham during the period of 50 years, and for this purpose the period has been divided into two sections, the first relating to the area of the city before its last extension, and the second giving the figures for the City as now constituted :—

	Birth-rate.	Death-rate.	Infant Mortality rate.
1876-1880	41.0	22.8	163
1881-1885	36.1	20.7	161
1886-1890	32.9	20.2	173
1891-1895	32.7	20.3	176
1896-1900	33.3	20.5	199
1901-1905	30.7	16.5	157
1906-1910	28.3	15.0	131
1911-1915	25.9	14.6	126
1916-1920	22.1	13.4	94
1921-1925	20.8	11.5	80

It will be noted from the above that comparing the five years ending 1880 with those ending 1925 in each case the rate has been approximately halved.

The next table shows the death-rate from infectious diseases, and it will be noted that in this case the reductions are even more remarkable.

DEATH-RATE FROM

	Smallpox	Measles	Scarlet Fever	Whooping Cough	Diphtheria and Croup	Enteric Fever	Diarrhœa and Enteritis	Tuberculosis	
								Pulmonary	Other forms
1876-1880	.01	.36	.98	.84	.38	.32	1.56	2.05	.52
1881-1885	.10	.43	.45	.69	.30	.19	1.25	1.84	.46
1886-1890	.00	.63	.23	.57	.32	.15	1.34	1.69	.48
1891-1895	.11	.39	.18	.54	.25	.17	1.37	1.52	.54
1896-1900	.00	.48	.17	.52	.34	.24	2.35	1.48	.48
1901-1905	.01	.36	.22	.41	.20	.12	1.33	1.34	.45
1906-1910	—	.36	.14	.36	.18	.06	0.96	1.16	.35
1911-1915	.00	.48	.14	.25	.18	.03	0.96	1.22	.29
1916-1920	—	.18	.04	.23	.16	.01	0.42	1.18	.22
1921-1925	—	.13	.03	.19	.12	.00	0.31	0.96	.15

From these figures it will be seen that smallpox and enteric fever have practically disappeared as a cause of death, and scarlet fever is well on the way to a similar position, while every other disease in the list shows an enormously diminished mortality.

I am,

Your obedient servant,

JOHN ROBERTSON,
Medical Officer of Health.

City of Birmingham.

REPORT OF THE MEDICAL OFFICER OF HEALTH
For the year 1925.

I. NATURAL AND SOCIAL CONDITIONS OF THE AREA.

AREA AND POPULATION.

The area of the City is 43,601 acres. This may be compared with the area and population of the six largest provincial cities as follows :—

	Area, 1921	Population, 1921	Persons per acre.	Persons per house.
Glasgow	18,589	1,034,174	55.6	4.60
Birmingham ...	43,601	919,444	21.1	4.83
Liverpool ...	21,242	802,940	37.8	5.43
Manchester ...	21,690	730,307	33.7	4.71
Leeds	28,090	458,232	16.3	4.22
Sheffield	24,930	490,639	19.6	4.65

ESTIMATE OF THE POPULATION.

The Registrar General estimates that the population of Birmingham on June 30th, 1925, was 945,900.

The local estimate is 952,766, that is 6,866 more than the Registrar General's estimate.

Many of the data which can be applied locally have been rendered unuseable by reason of the disturbed conditions since the war.

During the last intercensal period the increase of population was 79,242, or a yearly average during each of these ten years of 7,924 persons. During the same period the excess of births over deaths was 79,967 or an average of 7,996.

During 1912-21, therefore, the natural increase was nearly the same as the Census increase so that there could have been but a very slight excess of emigration over immigration.

The local estimated increase since the last Census is 33,322. The Registrar General's estimate is 26,456, while the natural increase was 33,900.

That the rate of increase in Birmingham has been fairly steady in recent years is said to be indicated by the net number of names added annually to the roll of Parliamentary Electors, which has been as follows :—

1922	3,686
1923	5,848
1924	4,930
1925	7,091

The growth of the *City as ascertained at the Census enumeration was as follows :—

	Population.	Increase.	Percentage increase.
1861	313,175	70,915	29.3
1871	367,177	54,002	17.2
1881	436,971	69,794	19.0
1891	478,113	41,142	9.4
1901	522,204	44,091	9.2
1911	840,202	81,139	10.7
1921	919,444	79,242	9.4

*City extended in 1891, 1909, and 1911. The figures for 1911 and 1921 apply to the present area.

Few of the great towns have shown such a regular and large increase in growth as Birmingham.

The natural increase, i.e., the excess of births over deaths has been as follows :—

1922	8,638
1923	8,821
1924	7,209
1925	6,734

PHYSICAL FEATURES AND GENERAL CHARACTER OF THE DISTRICT.

Birmingham is situated on one side of the Midland watershed of England. It is, therefore, on about the most elevated part of an area which is sometimes erroneously called the Midland plain. It is very near the central spot of England. It has no great river to carry away its waste products or to facilitate the transport of its manufactures. It is nowhere level, while there are few steep slopes. The undulating surface makes drainage easy and efficient.

The soil, as most people know the term, varies from the stiffest clay to the loosest gravel, being part of the area of the Bunter and Keuper beds of the Trias. Here and there are glacial deposits. The more or less flat areas along each side of the brooks which run through the City are water-logged and this may explain some of the excess in the incidence of rheumatic conditions which is found among people living in these areas.

But the fact that the whole area is relatively high gives it a bracing atmosphere, perhaps somewhat colder than at lower levels, but on the whole a very healthy climate.

The lowest level in the city is 267 feet O. D., and the highest 736 feet O. D.

NUMBER OF HOUSES AND OF OCCUPIERS.

	Occupied houses.	Families or separate occupiers.
Census, 1911	176,813	185,325
Census, 1921	190,459	203,813
Estimated, 1925	200,000	?

The rateable value in 1925 was £5,686,871. One penny rate yields £21,344. The rateable value in the six largest cities is shown below :—

Glasgow	£10,800,078
Birmingham	£5,686,871
Liverpool	£6,657,816
Manchester	£6,633,261
Leeds	£2,964,661
Sheffield	£2,491,261

SOCIAL CONDITIONS AND OCCUPATIONS.

Birmingham may properly be described as a factory town with a very miscellaneous and numerous variety of trades. While it has several large works, the predominating character of its trade is the number of factories where small numbers are employed. The artisans are careful, hard-working, and intelligent. They are generally anxious to secure for themselves wholesome conditions of life.

The following figures are extracted from the Census report of 1921—a period when many citizens could not follow their ordinary trade or business:—

OCCUPATIONS OF PERSONS OVER 12.

(Figures shown in italics are included in the Order total above).

Males.

Total occupied	292,929	
Unoccupied, including retired	37,431	
Metal workers (not Electro-plate or Precious Metals)		96,194
Fitters		*9,471*
Workers in precious metals, etc.		12,088
Electrical apparatus makers, fitters, etc.		6,140
Makers of foods, drinks and tobacco		5,355
Makers of foods		*4,557*
Makers of drinks		*785*
Workers in wood and furniture		14,157
Carpenters		*4,039*
Builders, bricklayers, etc.		10,452
Bricklayers and Masons		*2,287*
Painters and decorators		5,381
Transport workers		27,799
Railway workers		*6,505*
Road transport workers		*13,896*
Messengers and porters		*4,285*
Commercial and financial occupations		24,939
Proprietors, etc., of dealing businesses		*9,319*
Commercial travellers, canvassers		*3,531*
Salesmen, shop assistants, etc.		*7,203*
Insurance officials, agents, etc.		*1,473*
Public administration and defence		5,698
Professional occupations		6,388
Teachers		*1,564*
Persons employed in personal service		6,709
Innkeepers, barmen, etc.		*2,123*
Clerks, draughtsmen, typists, etc.		15,176
Warehousemen, packers, etc.		7,642
General or undefined labourers		15,981

Females.

Total occupied	151,950	
Unoccupied, including retired	229,030	
Metal workers		30,445
Makers of textile goods and articles of dress		9,372
Tailoresses		*2,123*
Dress and blouse makers		*2,071*
Embroiderers, milliners, etc.		*4,002*
Workers in rubber, bone, etc.		5,501
Commercial and financial occupations		12,509
Proprietors, etc., of dealing businesses		*4,291*
Shop assistants, etc.		*7,436*
Professional occupations		7,360
Midwives, nurses, etc.		*2,657*
Teachers		*3,887*
Persons employed in personal service		28,941
Domestic servants		*16,163*
Lodging house keepers		*2,188*
Innkeepers, barmaids		*1,760*
Waitresses		*1,110*
Laundry workers		*1,620*
Charwomen		*4,018*
Clerks, typists, etc.		19,769
Warehousewomen, packers, etc.		10,000

WORKPLACES.

During 1925 another volume of the 1921 Census was issued showing the number of employed persons over 12 years of age and the areas in which such persons were employed.

EMPLOYED PERSONS IN BIRMINGHAM.

	Males.	Females.
Total occupied persons enumerated in Birmingham ...	293,231	152,186
With no fixed place of work or place not stated ...	22,332	7,900
Workplace in Birmingham and living in City ...	255,525	141,482
Living in Birmingham but working outside	15,374	2,804
Living outside but coming into the City to work ...	33,417	18,286

Places from which persons came into Birmingham to work.

From Smethwick	10,634	From Walsall	1,412
Sutton Coldfield ...	4,265	Dudley	1,366
Oldbury	3,435	Halesowen	1,337
Solihull	3,138	Bromsgrove	1,231
West Bromwich ...	2,465	Meriden	1,172
Rowley Regis	1,854	North Bromsgrove ...	1,078

Other places, 18,316

Places in which residents in Birmingham went to work.

To Smethwick	8,367
West Bromwich	1,088
Other places	8,723

The excess of persons coming into certain Cities to work, over those who go out, is shown in the statement below.

	Excess of persons coming in over those going out.	Percentage of total population.
Birmingham	33,525	3.6%
Liverpool	38,007	4.7%
Manchester	74,944	10.3%
Leeds	2,945	0.6%
Sheffield	5,259	1.1%
Bristol	6,587	1.7%
Leicester	6,615	2.8%

It will be noted that all of these Cities attract dwellers from outside in varying degrees to employment in the town.

MARRIAGES.

The marriage-rates have been as follows :—

1881	16.2
1891	19.2
1901	18.8
1911	19.2
1921	15.9
1922	15.5
1923	16.3
1924	16.0
1925	16.9

BIRTHS.

The number of babies born in 1925 was 17,836, equal to a birth-rate of 18.8 per 1,000.

BIRTH-RATES PER 1,000.

	Birmingham.	England and Wales.
1901-1905	30.7	28.2
1906-1910	28.3	26.3
1911-1915	25.9	23.6
1916-1920	22.1	20.1
1921-1925	20.8	19.9
1916	23.1	20.9
1917	19.7	17.8
1918	19.4	17.7
1919	20.9	18.5
1920	27.6	25.5
1921	24.1	22.4
1922	21.5	20.4
1923	20.4	19.7
1924	19.2	18.8
1925	18.8	18.3

BIRTH-RATES IN WARDS.

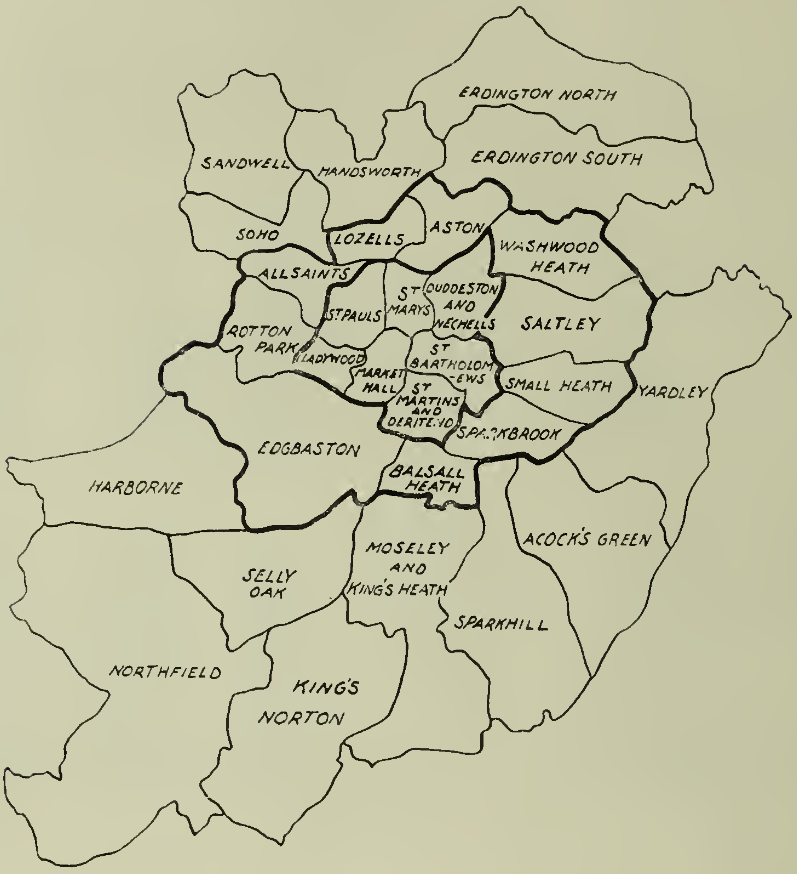
The birth rates in the different wards are shown below, as well as comparative figures going back to the extension of the City :—

	Ward.	Birth-rate.	Average Birth-rate.		
		1925	1912-15	1916-20	1921-25
Central Wards ...	St. Paul's	23.5	32.2	29.4	28.2
	St. Mary's	28.3	34.6	28.5	30.6
	Duddeston and Nechells ...	25.3	36.6	31.3	28.0
	St. Bartholomew's ...	25.1	33.6	29.9	28.3
	St. Martin's and Deritend	24.6	32.3	28.2	27.0
	Market Hall	19.5	24.7	22.4	21.9
	Ladywood	22.2	28.5	26.6	25.2
Middle Ring ...	Lozells	16.7	22.8	20.6	18.5
	Aston	22.5	30.5	25.9	24.6
	Washwood Heath ...	19.7	28.2	22.7	21.6
	Saltley	19.7	28.2	22.8	20.8
	Small Heath	14.6	22.8	20.3	16.6
	Sparkbrook	16.4	25.2	21.2	19.2
	Balsall Heath	17.0	23.1	19.9	19.6
	Edgbaston	12.0	16.4	15.3	13.6
	Rotton Park	19.9	27.9	23.5	21.7
	All Saints'	20.1	28.9	25.1	22.2
Outer Ring ..	Soho	16.3	21.9	17.7	17.2
	Sandwell	12.4	21.4	16.9	14.1
	Handsworth	12.6	19.2	17.0	14.5
	Erdington North ...	20.3	22.5	18.5	19.5
	Erdington South	14.9	21.5	19.0	17.0
	Yardley	16.3	23.0	20.5	17.6
	Acock's Green	16.7	26.3	20.7	17.9
	Sparkhill	17.1	17.8	15.4	17.4
	Moseley and King's Heath	11.5	17.0	15.5	13.3
	Selly Oak	16.0	25.9	21.8	17.6
	King's Norton	14.2	22.4	17.7	16.3
	Northfield	17.7	22.1	19.3	19.1
	Harborne	11.0	22.0	16.9	14.8

As the municipal wards are the areas used for statistical purposes throughout this report, a diagram has been prepared to indicate the position of each ward, the group of wards known as " central " and those known as the " middle ring " being indicated by a darker boundary line.

(*See diagram on next page*).

MUNICIPAL WARDS



The statement below indicates the relative birth-rates in the three groups of Wards and the reduction shown when the rate for 1921-25 is compared with that of 1912-15:—

	Birth-rate 1925	Average Birth-rate 1912-15	1916-20	1921-25	Decrease
Central Wards	24.1	31.8	28.0	27.0	15%
Middle Ring	17.9	25.4	21.7	19.8	22%
Outer Ring	15.2	21.8	18.2	16.6	24%

From the table it will be seen that the reduction in the birth-rate has been considerably greater in the suburban wards than in the centre of the town and that the rate in the latter is still more than half as high again as in the former.

ILLEGITIMACY.

The Registrar General states that there were 589 illegitimate babies born, as compared with 583 in 1924.

	Number of illegitimate babies born.	Rate per 1,000 unmarried women and widows, 15—45 years.
1912	673	5.9
1921	823	6.7
1922	719	5.8
1923	610	4.9
1924	583	4.6
1925	589	4.6

The illegitimacy rate for 1925 was 3.3 per cent. of the babies born.

The deaths of illegitimate infants numbered 82, equal to an infantile mortality rate of 139 per 1,000, as against 76 per 1,000 amongst legitimate babies.

The following statement indicates what provision existed for the babies born out of wedlock :

Total number reported in 1925	624
Number still remaining in infirmaries, etc.	87
Number who died before a visit was paid	51
Number removed before a visit was paid	86
Number visited once at least	400
Father and mother living together	156
Father making an allowance—	
(a) Under Order	48
(b) Voluntarily	56
Father not contributing	106
No information	34

DEATHS.

There were 11,102 deaths registered in Birmingham, as compared with 11,181 in 1924 and 10,248 in 1923.

Of these deaths there were 5,892 of males and 5,210 of females, that is to say, 682 more males died than females, notwithstanding the fact that there were in Birmingham approximately 50,000 more females than males.

DEATH-RATE PER 1,000 IN 1925.

Total death-rate per 1,000—11.7. Males—13.1. Females—10.4.

DEATH-RATES PER 1,000 IN BIRMINGHAM, 1871 TO 1925.

		Birmingham.	England and Wales.
1871-1875	(Old City)	25.2	22.0
1876-1880	,,	22.8	20.8
1881-1885	,,	20.7	19.4
1886-1890	,,	20.2	18.9
1891-1895	,,	20.3	18.7
1896-1900	,,	20.5	17.7
1901-1905	(Present Area)	16.5	16.0
1906-1910	,,	15.0	14.7
1911-1915	,,	14.6	14.3
1916-1920	,,	13.4	14.5
1921-1925	,,	11.5	12.2
1916	,,	13.5	14.4
1917	,,	12.6	14.4
1918	,,	15.2	17.6
1919	,,	13.0	13.7
1920	,,	12.6	12.4
1921	,,	11.3	12.1
1922	,,	12.1	12.8
1923	,,	11.0	11.6
1924	,,	11.6	12.2
1925	,,	11.7	12.2

COMPARATIVE DEATH-RATES IN NINE LARGEST TOWNS.

(*From Registrar-General's Figures.*)

London	11.7 per 1,000
Glasgow	14.8 ,,
Birmingham	11.5 ,,
Liverpool	13.7 ,,
Manchester	14.1 ,,
Sheffield	11.5 ,,
Leeds	12.5 ,,
Edinburgh	14.5 ,,
Bristol	13.2 ,,

From the above tables it will be apparent that Birmingham during the year 1925 occupied relatively a good position as compared with previous years and with the other comparable large towns.

Distribution of Death-Rates in Wards.

	Ward.	Death-rate 1925.	Average Death-rate 1912-15.	1916-20.	1921-25.
Central Wards ...	St. Paul's	14.9	20.9	18.1	14.5
	St. Mary's	17.7	25.0	20.6	16.6
	Duddeston and Nechells	13.2	20.8	17.7	13.4
	St. Bartholomew's ...	14.5	21.5	17.6	14.6
	St. Martin's & Deritend	15.4	20.5	19.0	15.0
	Market Hall	13.4	18.1	15.8	14.0
	Ladywood	12.6	17.7	16.5	13.1
Middle Ring ...	Lozells	12.8	13.7	13.1	12.2
	Aston	14.1	15.6	13.6	12.5
	Washwood Heath ...	9.7	13.0	11.4	10.0
	Saltley	9.2	12.1	11.7	9.4
	Small Heath	9.7	11.5	11.9	10.3
	Sparkbrook	11.8	12.9	12.8	11.1
	Balsall Heath	11.9	12.7	13.3	12.0
	Edgbaston	11.3	11.8	12.2	11.0
	Rotton Park	12.5	15.2	13.8	11.5
	All Saints'	12.8	14.9	13.4	11.8
Outer Ring ...	Soho	12.0	12.7	11.8	11.3
	Sandwell	8.1	10.0	10.1	9.3
	Handsworth	9.3	10.5	10.5	9.7
	Erdington North ...	9.3	10.6	10.4	9.8
	Erdington South ...	8.1	9.7	9.7	9.1
	Yardley	9.6	10.4	10.3	8.9
	Acocks Green	8.8	11.5	10.8	9.1
	Sparkhill	9.8	9.5	10.1	9.8
	Moseley and Kings Heath	10.4	9.6	10.6	10.9
	Selly Oak	8.6	11.7	10.4	8.9
	Kings Norton	8.3	9.9	8.9	8.4
	Northfield	9.3	10.1	9.2	8.9
	Harborne	9.5	10.5	10.8	9.6

St. Mary's Ward had a death-rate of 17.7 per 1,000 and therefore continues to hold the record for the highest death-rate of any district in the City.

The statement below summarizes the figures given in the table and indicates the relative death-rates in the three groups of Wards as well as the reduction shown when the rate for 1921-25 is compared with that of 1912-15:—

	Death-rate 1925	Average Death-rate 1912-15	1916-20	1921-25	Decrease
Central Wards	14.5	20.6	17.9	14.5	30%
Middle Ring	11.6	13.3	12.7	11.2	16%
Outer Ring	9.3	10.5	10.3	9.5	10%

It will be seen that the largest reduction in death-rates during the past fifteen years has been going on in the central districts, viz.: 30 per cent., as compared with 10 per cent. in the suburban districts and 16 per cent. in the Middle Ring of Wards.

MORTALITY AT DIFFERENT AGE PERIODS.

The death-rates at different age periods during 1925 were as follows :—

	Approximate Population.	Deaths.	Approximate Death-rate per 1,000.
Under 1 year	16,860	1,389	82.4
1 and under 2	16,700	425	25.4
2 ,, 3	17,150	142	8.3
3 ,, 4	17,620	109	6.2
4 ,, 5	19,560	79	4.0
5 ,, 10	91,610	198	2.2
10 ,, 15	92,880	142	1.5
15 ,, 20	88,660	199	2.2
20 ,, 25	83,330	253	3.0
25 ,, 35	149,840	529	3.5
35 ,, 45	137,790	797	5.8
45 ,, 55	109,910	1,338	12.2
55 ,, 65	65,060	1,588	24.4
65 and upwards	45,790	3,914	85.5

The reduction in the death-rate at various age periods during the past ten years is shown below :—

Age.	Death-rate 1913-15	Death-rate 1923-25	Decrease.
Under 1 year	141.4	82.3	42%
1 and under 2	43.8	24.0	45%
2 ,, 3	16.6	8.8	47%
3 ,, 4	9.8	5.7	42%
4 ,, 5	6.7	3.2	52%
5 ,, 15	3.0	1.9	37%
15 ,, 25	2.7	2.6	4%
25 ,, 35	4.2	3.6	14%
35 ,, 45	8.6	5.8	33%
45 ,, 65	21.3	16.4	23%
65 and upwards	86.7	83.0	4%

CHIEF CAUSES OF DEATH.

	Average Number of Deaths.					Increase or Decrease 1921-25	
Deaths from	1901-5	1906-10	1911-15	1916-20	1921-25	on 1901-5	%
Measles	279	294	419	168	121	— 158	— 57
Whooping Cough	316	294	213	206	180	— 136	— 43
Diphtheria	159	149	155	143	109	— 50	— 31
Influenza	102	150	115	780	317	+ 215	+ 211
Pulmonary Tuberculosis	1,039	947	1,057	1,062	903	— 136	— 13
Other Tuberculosis	345	289	249	199	143	— 202	— 59
Cancer	579	685	818	928	1,131	+ 552	+ 95
Cerebral Hæmorrhage	?	?	514	469	479	— 35*	— 7
Organic Diseases of Heart	913	930	1,151	1,220	1,207	+ 294	+ 32
Arterio Sclerosis	?	?	96	166	240	+ 144*	+ 150
Cerebral Embolism and Thrombosis	?	?	76	114	120	+ 44*	+ 58
Bronchitis	1,255	1,153	1,100	1,094	933	— 322	— 26
Pneumonia	1,116	1,066	1,041	1,029	917	— 199	— 18
Diarrhœa and Enteritis	1,027	780	831	374	287	— 740	— 72
Nephritis and Bright's Disease	?	?	342	256	238	— 104*	— 30
Premature Birth	?	?	471	423	398	— 73*	— 15
Infantile Debility, etc.	?	?	430	224	147	— 283*	— 66
Old Age	?	?	607	579	517	— 90*	— 15
Suicide	74	81	80	71	108	+ 34	+ 46
Accidents, etc.	346	363	381	325	274	— 72	— 21

* 1921-25 Increase or Decrease on 1912-15.

It will be seen that the five diseases which cause the largest mortality are Tuberculosis, Cancer, Heart Disease, Bronchitis and Pneumonia. In each instance the deaths amount to about 1,000 per annum.

In certain cases the increase or decrease during the past 25 years is no doubt more apparent than real, being due to more accurate diagnosis and more exact certification.

The mortality from Infectious Diseases (including Tuberculosis) is given in Section VI. (see page 56).

The chart on the opposite page shows the mortality curves during the past 25 years for four of the principal causes of death, viz., Pulmonary Tuberculosis, Bronchitis, Pneumonia, and Cancer.

INFANT MORTALITY.

(See page 90).

CANCER.

One thousand two hundred and four persons died of cancer in 1925 as compared with 1,251 in 1924.

The appended table shows the recorded mortality from this disease since 1901.

DEATH-RATE FROM CANCER PER 1,000.

1901-1905	.74
1906-1910	.84
1911-1915	.94
1916-1920	1.03
1921-1925	1.21
1916	1.00
1917	1.02
1918	1.02
1919	1.01
1920	1.12
1921	1.12
1922	1.18
1923	1.17
1924	1.30
1925	1.27

Unlike many other fatal diseases the death-rate was rather lower in the poorer class districts than in the suburban ones, as indicated below.

DEATH-RATE FROM CANCER IN DISTRICTS.

		Average Rate.			
	1925.	1912-15.	1916-20.	1921-25.	Increase*
Central Wards ...	1.16	1.04	1.16	1.17	12%
Middle Ring ...	1.35	0.95	1.08	1.26	33%
Outer Ring ...	1.25	0.93	1.02	1.21	30%
City	1.27	0.96	1.03	1.21	26%

*1921-25 compared with 1912-15.

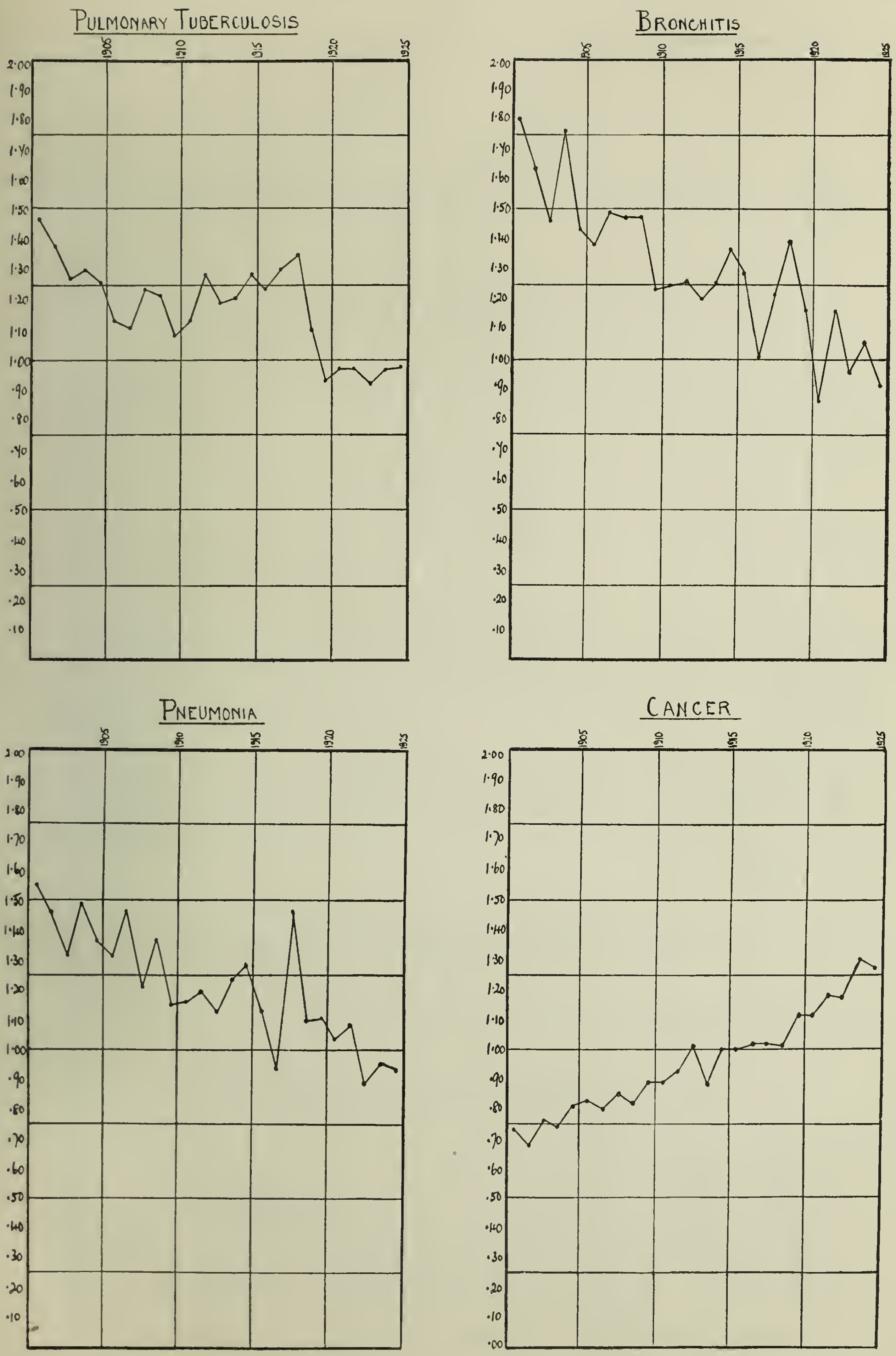
Cancer mortality in the various parts of the body is shown in the table opposite.

It will be noted from the table that—

(1) Males die more frequently than women from Cancer of
- (a) The lips, tongue, palate and jaw.
- (b) The digestive tract.
- (c) The skin.
- (d) The other organs.

(2) Women have a large mortality from Cancer of the breast and reproductive organs.

DEATH RATE PER 1000.



Pulmonary Tuberculosis

Bronchitis

Pneumonia

Cancer

DEATHS FROM CANCER IN 1925.

Ages.	Lip, Tongue, Palate. Jaw.			Pharynx, Œsophagus, Stomach, Liver.			Peritoneum, Intestine, Rectum.			Female Organs of Reproduction.			Breast.			Skin.			Other Organs.			Total.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Under 1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1—	—	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	2	1	3	2	3	5
5—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1	—	1
15—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	2	1	3
20—	—	—	—	1	—	1	—	—	—	—	—	—	—	1	1	—	—	—	1	2	3	2	3	5
25—	—	—	—	3	—	3	4	—	4	—	5	5	—	3	3	1	—	1	3	1	4	11	9	20
35—	1	1	2	9	8	17	14	7	21	—	16	16	—	16	16	—	—	—	11	12	23	35	60	95
45—	13	2	15	41	26	67	25	15	40	—	48	48	—	37	37	1	—	1	38	16	54	118	144	262
55—	20	4	24	66	37	103	42	32	74	—	33	33	—	28	28	6	—	6	49	17	66	183	151	334
65—	10	2	12	54	36	90	65	38	103	—	23	23	—	28	28	3	2	5	47	16	63	179	145	324
75—	7	1	8	17	27	44	19	27	46	—	7	7	—	10	10	2	1	3	13	9	22	58	82	140
85—	1	—	1	1	3	4	3	—	3	—	1	1	—	2	2	1	—	1	1	2	3	7	8	15
All Ages	52	10	62	192	140	332	172	119	291	—	133	133	—	125	125	14	3	17	168	76	244	598	606	1204

During the year great efforts have been made—

(a) To understand what causes Cancer.
(b) To find a remedy for the disease.
(c) To get some information which will lead to prevention.

In Birmingham a branch of the British Empire Cancer Campaign has been formed, while in England numerous other branches have been formed; and both centrally and locally well endowed laboratory research has been commenced.

The Ministry of Health has established various Committees to investigate aspects of the cancer problem not otherwise dealt with.

The League of Nations Health Section is examining the question from its international bearing, so that every civilised country throughout the world is attempting to solve this problem.

The cancer which is proving to be the most amenable to treatment is cancer of the breast, and for this purpose both locally and centrally a good deal of evidence is forthcoming that the results of early and complete operation are far better than surgeons were aware of because they had found it difficult to follow up the results of removal in early cases. The results appear to be so good that it is the duty of all medical men and all health authorities to bring to the knowledge of every woman that the best chance of complete cure lies in early operation. For this purpose a house to house distribution was carried out last year of a leaflet urging women to consult a doctor at once whenever anything abnormal was noticed in the breast.

During the year information was obtained in regard to the women who died of cancer of the breast, similar to that in the two previous years. This information for the three years may now be briefly summarised, as follows:—

Total number of deaths from cancer of breast, 1923-25	355
Cases investigated	331
Average interval between first noticing a lump and consulting a doctor (242 cases)	12.1 months
Average interval between first noticing a lump and operation (152 cases) ...	13.4 months
Between operation and death (182 cases)	35.7 months

Obviously the above are the unsuccessful cases. Those women who recovered from true cancer do not appear in these statistics. The figures are, however, useful as indicating the very large number of women who delay obtaining medical advice, and even when that has been obtained delay having an operation. The initial stage of cancer of the breast is usually painless and is regarded as an unimportant lump. If operated on in this stage a good chance of complete cure can be offered, while at present there is little chance of cure if any delay occurs.

Much work, in addition to surgical work, is being attempted in Birmingham by radiologists in severe cases of cancer and by the use of radium in certain cases.

There are many other superficial locations of cancer, which if investigated with the same care as cancer of the breast will yield good results by the surgeon.

The following table shows the mortality from cancer in different positions at certain periods and the percentage increase when the year 1925 is compared with the years 1912-1915.

CANCER DEATH-RATE PER 1,000.

Seat of disease.	1925.	Average. 1912-15.	1916-20.	1921-25.	Increase.
Lip, tongue, palate, jaw	.07	.06	.07	.07	17%
Pharynx, œsophagus, stomach, liver	.35	.30	.32	.35	17%
Peritoneum, intestine, rectum ...	.31	.19	.23	.27	42%
Female organs of reproduction ...	.14	.11	.13	.14	27%
Breast	.13	.10	.11	.13	30%
Other organs	.27	.18	.20	.25	39%
All forms	1,27	,96	1.07	1,21	26%

BRONCHITIS AND PNEUMONIA.

The mortality from these two formidable causes of death has been as follows :—

Death-Rates from Bronchitis and Pneumonia.

	Bronchitis.		Pneumonia.	
	Birmingham.	England & Wales.	Birmingham.	England & Wales.
1901-1905	1.62	1.24	1.44	1.27
1906-1910	1.41	1.09	1.30	1.23
1911-1915	1.27	1.13	1.20	1.10
1916-1920	1.22	1.20	1.15	1.18
1921-1925	1.00	?	0.98	?
1916	1.29	1.25	1.13	1.06
1917	1.01	1.25	0.94	1.14
1918	1.22	1.23	1.46	1.65
1919	1.39	1.24	1.10	1.06
1920	1.17	1.01	1.11	0.99
1921	0.87	0.89	1.04	0.92
1922	1.17	1.07	1.08	1.07
1923	0.96	0.85	0.89	0.87
1924	1.06	0.97	0.95	1.00
1925	0.92	?	0.93	?

The chart opposite page 16 shows the mortality-curve for these diseases during the past 25 years and indicates very clearly the great reduction which has taken place.

The distribution of the mortality over the groups of wards has been as follows :—

Bronchitis.

Death-Rates per 1,000 of Population.

		Average Rates			*Increase or
	1925.	1912-15.	1916-20.	1921-25.	Decrease.
Central Wards	1.18	2.20	2.09	1.37	—38%
Middle Ring	.93	1.13	1.19	.99	—12%
Outer Ring	.67	.70	.75	.73	+ 4%
City	.92	1.27	1.22	1.00	—21%

*1912-1915 compared with 1921-1925.

Pneumonia.

Death-Rates per 1,000 of Population.

		Average Rates			*Increase or
	1925.	1912-15.	1916-20.	1921-25.	Decrease.
Central Wards	1.46	1.99	2.02	1.61	—19%
Middle Ring	0.91	1.08	1.09	0.92	—15%
Outer Ring	0.56	0.77	0.69	0.57	—26%
City	0.93	1.21	1.15	0.98	—19%

*1912-1915 compared with 1921-1925.

It is obvious from the above figures that there is still room for great improvement in the mortality in the more congested central areas, where at present the death-rate is twice as high as in the outer ring.

DEATHS IN PUBLIC INSTITUTIONS.

Of the 11,102 deaths in 1925, 4,380 occurred in institutions, viz. :—

2,599	in Poor Law Institutions.
307	in publicly provided Fever Hospitals, etc.
285	in publicly provided Sanatoria.
1,145	in other hospitals charitably supported.
44	in Homes.

POOR-LAW RELIEF.

The following statement, kindly prepared for me by Sir James Curtis, Clerk and Solicitor to the Birmingham Union, indicates the amount of Poor Law Relief granted during the year :—

BIRMINGHAM UNION.

STATEMENT as to Guardians' expenditure raised from Rates, and numbers relieved.

Year ended March	Total amount raised from Rates £	Expenditure on account of Unemployment included in Column 2 £	Number of persons relieved.					No. of persons included in Column 5 suffering from disease of body or mind relieved in Poor Law Infirmaries
			1st Jan.	In Institutions	In Asylums	At own Homes	Totals.	
1	2	3	4	5	6	7	8	9
1922	909,000	100,000	1922	7,096	2,068	66,380	75,544	2,489
1923	1,260,000	456,000	1923	7,712	2,225	64,414	74,351	2,649
1924	1,323,906	530,000	1924	7,800	2,329	40,293	50,422	2,946
1925	1,272,000	469,000	1925	7,705	2,207	23,498	33,410	3,081

Column 2 includes not only expenditure on Relief of the Poor but expenditure partly connected and partly unconnected as well as expenditure wholly unconnected with Relief of the Poor.

N.B.—The above statement refers to expenditure out of Rates only. In respect of the years 1922, 1923 and 1924 loans totalling to £1,064,000 were borrowed to meet part of the cost of relief to unemployed persons and their dependants. Annual repayments of Principal and Interest in respect of these loans were met out of rates in the years 1923, 1924 and 1925, and are included in the figures in Columns 2 and 3.

Column 9 includes a number of Non-Poor Law cases (*i.e.*, Mental Deficiency Act cases, Local Education Committee's cases, etc.).

II. GENERAL HEALTH SERVICES.

HOSPITAL PROVISION.

The following is a list of Birmingham Hospitals (other than private hospitals) and the accommodation provided by them. Those marked (c) are supported wholly by the City Council, those marked (p) partly so.

1. Tuberculosis.

	No. of beds.
Yardley Road Sanatorium (c)	325
West Heath Sanatorium (c)	102
Salterley Grange Sanatorium, Cheltenham (c)	68
Romsley Hill Sanatorium, Halesowen (p)	120
Woodlands and Forelands (Cripples' Union) (p)	177

(Also a few beds in general hospitals towards the maintenance of which the City Council makes a grant).

2. Maternity.

Maternity Hospital (p)	65
Heathfield Road Maternity Home (c)	18

(Also a number of beds (about 75) in the Poor Law Hospitals). The City Council makes a grant for certain of these).

3. Children.

The Children's Hospital (p)	136
Witton Babies' Hospital (c)	25
Carnegie Institute (c)	9

(Also certain beds (about 250) in the Poor Law Hospitals).

4. Fever.

City Hospital, Little Bromwich (c)	466
City Hospital, Lodge Road (c)	253

5. Smallpox.

Witton Smallpox Hospital (c)	24

6. OTHER.

(a) *General Hospitals*—

The General Hospital	369
Jaffray Hospital	50
Homœopathic Hospital	50
Queen's Hospital	224
Dudley Road (Poor Law)	926
Selly Oak (Poor Law)	500

(b) *Special Hospitals* (exclusive of mental hospitals).

Women's Hospital (p)	135
Eye Hospital (p)	115
Ear and Throat Hospital	42
Orthopœdic Hospital	80
Skin and Urinary Hospital	22
Nerve Hospital	32

AMBULANCE SERVICE.

There is now a good and efficient motor ambulance service for all purposes in the City.

For accidents the City Police have	7 ambulances.
For cases of illness requiring removal to or from hospital or otherwise, the Royal Red Cross, at the cost of the patient, or of the Corporation, have	4 ambulances.

In addition there are several ambulances attached to hospitals or factories.

For acute infectious diseases the Public Health Department have	4 ambulances.
For Tuberculosis the Public Health Department has	1 ambulance.

CLINICS AND TREATMENT CENTRES.

Maternity and Child Welfare Centres	22
Day nurseries	0
School clinics	8
Tuberculosis dispensaries	1
Treatment Centres (Venereal Diseases)	3

PUBLIC HEALTH OFFICERS OF THE CITY COUNCIL.

Medical Officers, whole time and part time	42
Clerical staffs	64
Inspectors, general and special	52
Women visitors	102
Nurses	256
Maids	187
Other special officers	33
Porters, workmen, etc.	192
	928

PROFESSIONAL NURSING IN THE HOME.

The supply of nurses for general purposes is provided by thirteen district nursing associations. These cover the whole area of Birmingham with the exception of a few outlying sparsely populated areas. These associations accept private patients and also undertake to nurse any cases of measles, whooping cough and pneumonia which are referred to them by the Public Health Department at a uniform charge of 10/- per case. In any cases of the above diseases coming in the first place to the knowledge of the District Nursing Association a similar fee is paid provided the name and address of the patient is sent to the Public Health Department forthwith. For the better classes the nurses are obtained from one of the many nursing organisations in the City.

HEALTH VISITORS' WORK.

(Report by Miss Blanche Gardiner, B.A., Superintendent of Health Visitors).

The total number (about 94) of Health Visitors (General, Tuberculosis, and Infant Welfare) remained fairly constant during the year, though two of the Tuberculosis Visitors, who resigned, were not replaced; and two general Health Visitors (formerly whole-time ones), again were asked to give a large share of their time to Infant Welfare Centres and visits.

There was thus, a continued partial depletion of the general Health Visiting Staff, which already had more infectious disease, and other work to do, than it could cope with satisfactorily.

One Infant Visitor left to be married; and several others resigned in order to take posts at hospitals or elsewhere.

The following table indicates the class of cases dealt with by the general Health Visitors:—

Primary Visits:—	1923.	1924.	1925.
House Inspection	5,333	2,868	1,759
Infant Visits (including Stillbirths) ...	2,367	1,773	1,532
Measles	6,955	5,168	10,087
German Measles	79	102	2,410
Chicken Pox	3,545	3,817	4,975
Whooping Cough	1,364	3,468	4,320
Mumps	1,041	1,754	5,789
Influenza	397	389	429
Pneumonia	2,245	2,522	2,309
Epidemic Diarrhœa	10	8	8
Scabies	164	106	72
Impetigo	926	641	606
Conjunctivitis	64	62	43
Enlarged Glands	686	654	1,064
Bronchitis, Colds, etc.	2,514	2,660	3,357
Neglect, Insufficient Clothing, etc. ...	92	85	75
Verminous Cases	112	98	70
Visits to Schools	235	285	258
Visits to obtain addresses	271	407	690
Visits to Officials, Doctors, etc.	468	540	345
Visits to aged persons or on their behalf	214	145	130
Visits for special enquiries	516	842	734
Country Holiday Inspections	106	46	18
Health Talks	15	9	6
Other Visits	664	636	518
Total Primary Visits	30,383	29,085	41,604
Re-Visits	23,582	24,028	18,965
Total Effective Visits	53,965	53,113	60,569
Useless Visits (Out, Removed, etc.)	4,419	4,449	5,564
Grand Total	58,384	57,562	66,133

Scabies.

The number of scabies cases, reported from the schools, etc., and visited in the homes, still shows a diminution, being 72, as compared with 106, and 164, and 233, in the three previous years.

Twenty-five tickets for free baths at the Skin Hospital, were given by the Health Visitors to those scabies sufferers (other than school-children) who could not afford to pay.

Pneumonia.

There were rather fewer notifications of pneumonia this year than last, the doctors having notified 2,196 cases (as compared with 2,361 in 1924); and the Health Visitors paid 2,309 primary visits, and 3,401 re-visits, to these and to other cases of pneumonia, reported by the District Nursing Societies, etc.

Unless the doctor notifying desires otherwise, the Health Visitors visit on the day of receipt of notification; and they impress upon the relatives, the importance of strict obedience to the doctor's instructions. They also help them to get into touch with the District Nurses, as early as possible, or with the various agencies, when other help is needed.

The Birmingham District Nursing Societies

Again rendered most valuable assistance in nursing 889 cases of pneumonia, severe measles and whooping cough, in accordance with arrangements made for payment, by the Public Health Department.

Births.

The general Health Visitors (whose visits to infants are mainly confined to those whose births occur beyond the boundaries of the various Maternity and Infant Welfare Centres), paid 1,532 primary visits, and 5,299 re-visits, included in which were 35 visits in connection with still-births.

Infectious Diseases.

The above table of figures shows that a large proportion of the Health Visitors' time is occupied in visiting homes where children are suffering from measles, German measles, whooping cough, chicken-pox, and mumps. In connection with these diseases alone, 17,581 primary visits, and 14,698 re-visits, were paid during the year.

These visits, for giving advice and instructions, as to the necessary exclusion of certain school-children, also afford the Health Visitors the opportunity of entering many homes, and of seeing bedrooms, etc., about the condition of which they might otherwise be unaware.

In a joint memorandum, issued in the early part of the year, by the Ministry of Health, and the Board of Education, re closure of, and exclusion from schools, new regulations were made, and in the case of mumps, there has been an alteration of procedure.

The Aged.

As mentioned previously the care of the uncared-for aged, still remains one of the most difficult problems, with which the Health Visitors have to deal. Although there were slightly fewer cases (130, compared with 145 last year), reported to the Health Department (entailing 130 visits and 323 re-visits), yet they were peculiarly difficult ones and much time had to be expended on each visit.

Some old people are devoid of any relations or friends, and these we are most anxious to help in every way possible. When, however, there are near relations, who wish to shelve their own responsibility, and place it upon the Health Department, then we remind them that, as it was the parents' duty to look after their children when young, so now it behoves the latter when grown-up, to help and care for their now old and helpless parents.

(The aged blind, besides getting occasional visits from the Health Department, and fortnightly visits from the Birmingham Royal Institution for the Blind, are entitled to the Old-Age Pension, at a much earlier age (50), than they would be, if " sighted").

Special Enquiries.

Among special enquiries made were some investigations into deaths from cancer of the breast.

The Staff of Visitors.

The final paragraph of this Report each year affords one the opportunity of touching on a more personal note, respecting the Visitors themselves. They need to be regarded, not merely as pawns in the game, and in the general scheme of lessening the child-mortality rate, but also as being themselves human factors, whose own health and welfare, also require consideration.

Unfortunately while the amount of work to be done increases, yet in the persistent cry for " Economy " the number of workers remains constant, or is even lessened; with the inevitable result, that the Visitors become unduly worried and overworked.

So may it be strongly urged, and even broadcasted that, whatever is effected at the expense of the Visitors' nerves and health, is not true, but false, economy; and also that where Economy is necessary, then it should be practised, not on *people*, but on *things*.

LEGISLATION IN FORCE.

The following is a list of Acts relating to the Public Health in force in Birmingham :—

General Acts.

Public Health Act, 1875.
Public Health Amendment Act, 1890 (Part III. adopted).
Public Health Acts Amendment Act, 1907, Secs. 36, 44, 46, 51, 53, 55, 58, 62, 65.
Infectious Disease Prevention Act, 1890.
Infectious Disease (Notification) Act, 1889.
Housing of the Working Classes Act (Part III. adopted).
Housing and Town Planning Act, 1909, Sections 14, 15, 16 and 17.
Housing and Town Planning Act, 1919, Sections 26 and 28.
Housing Act, 1925, Part I except Sec. 4 and Sections 11 to 22 (inclusive).
Public Health (Tuberculosis) Act, 1921.
Public Health (Officers) Act, 1921.
Public Health Act, 1925 (Part VII.) (excluding Section 64 and Sections 66, 67 and 72).
Sale of Food and Drugs Acts, 1875 to 1899.
The Margarine Act, 1887.
The Butter and Margarine Act, 1907.
Milk and Dairies (Consolidation) Act, 1915.
Milk and Dairies (Amendment) Act, 1922.
Canal Boats Acts, 1877 to 1884.
Contagious Diseases (Animals) Act, 1878 (Section 34).

Shops Acts, 1912, 1913, 1920.
Seats for Shops Assistants Act, 1899.
Factory and Workshop Acts, 1891, 1895, 1901, 1907.
Midwives Acts, 1902 and 1918.
Rag and Flock Act, 1911.
The Poisons and Pharmacy Act, 1908.
Notification of Births Act, 1907.
The Notification of Births (Extension) Act, 1915.
Blind Persons Act, 1920, Section 2.
Municipal Corporations Act, 1882.
The Epidemic and Other Diseases Prevention Act, 1883.
The Cleansing of Persons Act, 1897.
Rats and Mice (Destruction) Act, 1919.
Maternity and Child Welfare Act, 1918.
Shops Early Closing Amendment Act, 1920 and 1921.
Bread Acts (Amendment) Act, 1922.

LOCAL ACTS.

The Birmingham Corporation (Consolidation) Act, 1883.
The Birmingham Corporation Acts, 1903, 1914 and 1919.

BYE-LAWS.

Lime Kilns, 1864.
Common Lodging Houses, 1909.
Nuisances, 1909.
Tents, Vans, Sheds used for human habitation, 1909.
Rag, Bone and Skin Merchants, 1909.
Public Slaughter Houses, 1909.
Private Slaughter Houses, 1909.
Private Slaughter Houses, 1910 (Sunday Slaughter).
Knacker's Yards, 1909.
Good Rule and Government, 1914 (Offensive Offal through Streets, Bye-law No. 8).
Underground Rooms, 1915.
Houses let in Lodgings, 1922.

REGULATIONS.

Common Lodging Houses.
Dairies, Cowsheds and Milkshops.
Cinemas and Picture Houses.
Conduct and the Management of Infectious Hospitals and Sanatoria.
Venereal Diseases.
The Public Health (Milk and Cream) Regulations, 1912.
The Public Health (Milk and Cream) Regulations, 1912, Amendment Order, 1917.
The Public Health (Dried Milk) Regulations, 1923.
The Public Health (Condensed Milk) Regulations, 1923.

III. SANITARY CIRCUMSTANCES.

WATER SUPPLY.

Birmingham water is derived from four sources :—

1. An upland gathering ground in Wales.
2. Brooks at Whitacre.
3. Three deep wells in the City, and
4. A few shallow wells in the outskirts for individual houses.

1. The Welsh gathering ground. This is 45,562 acres in extent, and is owned and controlled by the Corporation. It is situated in the counties of Radnor, Brecknock, Cardigan, and Montgomery, and the waters from it drain into the Rivers Elan and Claerwen.

The lowest level in the reservoirs is 700 feet O.D., while the highest inhabited area in the City is 630 O.D. The average rainfall on the gathering ground is 61.3 inches, and the surface of the gathering ground is mainly impermeable silurian shales, flagstones, and conglomerates.

It will be gathered from the above that there must be few areas in this country more suitable for sources of water supply. It is said that the total yield of this gathering ground is about 99,000,000 gallons per diem, but the maximum supply to the City at present is under 25,000,000 gallons per diem.

2. The brook supply. Water is also taken from the Rivers Bourne and Blythe at Whitacre, when these brooks are not in flood. The water is then impounded and allowed to sediment, afterwards being filtered or filtered and chlorinated. Both streams flow sluggishly through a well cultivated, agricultural district, and as a result both streams may be considered not desirable as sources for a public water supply.

3. Deep Wells. There are three deep wells, sunk in the Bunter sands and pebble beds, viz., one at Short Heath, one at Aston, and another at Longbridge. The water from these wells is brought into use only when required. The water from Aston well is now chlorinated. The area over the surface of these wells is becoming populated.

4. Shallow wells. These supply individual houses in the rural area surrounding the City.

Filtration.

The water from the Welsh gathering ground is passed through rough filters in Wales, and is passed through fine sand filters on arrival in Birmingham. The water from the River Bourne is filtered through old sand filters, while that from the Blythe is filtered through mechanical filters and then chlorinated.

Houses Supplied.

The City supply is available for 198,688 houses, while 411 public-houses and 15 clubs are supplied by meter. There are 593 houses not on the supply. The supply of water is constant and adequate.

In the great majority of the courtyard houses there is no water supply inside the house, a block of houses being served by a standpipe in the yard. It is difficult in many of these houses to provide an inside tap, but wherever there is a " scullery " in which a sink with a tap over it can be provided this is being enforced, the Corporation bearing one-third of the cost in accordance with Section 27 of the Birmingham Corporation Act, 1914. In houses without " sculleries " one tap to every eight houses is required.

Quality of Water.

Systematic reports are made every month to the Water Committee on the quality of the water supplied to the dwelling houses in the City. For this purpose numerous samples are submitted to the City Analyst for chemical analysis and to the City Bacteriologist for bacteriological examination.

The following are the chemical results of the last sample analysed from each of the sources of supply, and these may be taken as fairly representative of the quality of the water in each case. As stated above, a very large number of samples from each supply are examined every year.

Chemical Analyses of Waters made by J. F. Liverseege, F.I.C. (City Analyst).

	Parts per 100,000.						
Description.	Total Solid Matter.	Free Ammonia.	Albuminoid or Organic Ammonia.	Nitrogen in Nitrates.	Oxygen consumed in 3 hours at 27°C.(80°F)	Chlorine in Chlorides.	Hardness (as $CaCO$
Welsh Water	5.0	.000	.002	0	.28	0.8	1.9
Whitacre Filtered Water	31.6	.000	.003	.11	.08	2.3	21
Shortheath Well ...	41	.001	.001	1.0	0	2.8	—
Aston Well	45	.000	.001	.81	.01	3.4	30
Longbridge Well ...	21.6	.002	.002	.37	.00	1.5	13

					Appearance in 2-ft. Tube.			
	Total Alkalinity (as $CaCO_3$.)	Actual $CaCO_3$	Plumbo-Solvency.	Erosion 1 day.	Turbidity.	Red.	Yellow.	Blue.
Welsh Water	1.0	1.0	—	1.7	0	0.8	3.0	0
Whitacre Filtered Water	16.2	—	—	0	0	0	0.6	0.4
Shortheath Well ...	8.2	—	—	—	0	0	0.4	0.8
Aston Well	14.9	1.5	0	0	0	0	0.2	0.6
Longbridge Well ...	8.2	6.4	—	—	0	0	0.4	0.2

The results of the bacteriological examination of the last sample taken of the above mentioned waters were as follows :—

BACTERIOLOGICAL EXAMINATION OF WATERS MADE BY DR. H. G. M. HENRY (City Bacteriologist).

Source.	Number of Micro-organisms obtained from 1cc of Water. Ordinary Gelatine Culture.	Number of days Incubated at 20 deg. C.
Welsh Water	0	2
	8	4
	16	7
Whitacre Filtered Water ...	11	2
	20	4
	35	7
Aston Well	2	2
	4	5
	4	7
Longbridge Well	3	2
	32	7
Shortheath Well	8	2
	22	7

The amount of water supplied in Birmingham has increased as shown in the following table :—

Year.	Average daily consumption.
1876	8,304,000 gallons.
1885	11,804,000 ,,
1895	15,972,000 ,,
1905	18,230,000 ,,
1915	24,058,000 ,,
1925	25,574,000 ,,

RIVERS AND STREAMS.

The streams which flow through Birmingham are small and mainly under the control of the City Authorities except, perhaps, the River Tame. This river receives drainage from other towns and villages beyond the City. It is grossly polluted and complaints of smell are commonly received during the summer months. Recently a conference was held between the authorities concerned with a view to abating the nuisance and this has already had a good result.

The flooding again of the Hockley Brook in 1925 caused considerable alarm and nuisance. Here extensive works have been in operation during several years with a view to relieving the conditions which produce the flooding. It is said that this work will be completed in 1926.

DRAINAGE AND SEWERAGE.

The present arrangement is that the sewerage of the City is under the control of the Public Works Committee of the City Council, while the treatment of the sewage is under the control of the Birmingham Tame and Rea District Drainage Board, whose works are partly within the City, but for the most part beyond the City boundary.

The drainage of all existing dwellings is inspected by the Staff of the Public Health Department.

CLOSET ACCOMMODATION.

Almost all the closet accommodation in the City is of the water closet type, privies being only allowed in outlying parts where no proper system of sewerage at present exists.

Efforts have again been made during the year to increase and improve the closet accommodation, especially in the case of court yard houses. It is highly desirable that there should be a separate closet to each house and where possible this is being urged. Where it is not practicable to provide a closet to each house the Public Health Committee have decided to accept as a minimum one water closet to two courtyard houses. It will be seen from the table on page 29 that over 1,400 additional water closets were provided during the year and more than 3,700 closets were repaired or altered.

SCAVENGING.

(Statement by Mr. J. Jackson, M.I.C.S., Superintendent of Salvage Department).

The Salvage Department is responsible for the collection and disposal of house refuse and also undertakes the removal of trade, market and slaughterhouse refuse.

In 1922 the City Council decided to abolish the practice of tipping crude house refuse, and schemes were then approved for the erection of new plant at an estimated cost of £450,000.

In continuance of this policy, two of the schemes have been completed, viz., the extension of the Montague Street plant at a cost of £20,000, and the erection of a modern Refuse Utilization plant at Brookvale Road, at a cost of £100,000.

The completion of these two schemes has resulted in the abolition of five tips, and the tipping of 16,000 tons per annum of crude house refuse.

A further plant erected at Tyseley will also be opened in June of this year and will result in the total abolition of the tipping of all crude house refuse inside the City area.

The Department collects from over 208,000 premises weekly, and for this purpose a fleet of 74 electric vehicles, three petrol vehicles and 90 horses is employed.

The work of substituting portable ashbins with proper covering for fixed receptacles is proceeding rapidly, and the following table shows the progress of the work during recent years:—

Date	No. of Premises visited	No. of standard bins Good	Bad	No. of other bins	No. of tubs and other movable recepacles	No. of bin-sheds containing receptacles	No. of Ash Pits not containing standard bins	No. of Pans	No. of Wet Pits	No. of Dry Pits	No. of Cess-pools
Feb., 1924	199,809	107,808	13,057	2,782	11,328	39,440	38,009	451	351	362	183
May, 1924	200,677	112,111	11,733	2,780	10,655	41,775	36,271	451	351	342	183
Sept., 1924	200,983	123,821	7,328	2,766	8,915	49,226	30,820	441	357	318	194
Mar., 1925	204,509	142,910	4,211	2,591	5,669	61,822	19,917	429	347	296	196
Oct., 1925	205,942	149,477	3,520	2,275	4,591	65,389	16,856	429	347	296	196
Dec., 1925	208,308	156,839	2,660	2,039	3,571	70,490	12,125	431	283	243	195

With reference to the excreta pans and pits, it may be mentioned that these are situated mainly in the rural areas of the City, and the slight increase in the number of cesspools is also due to the erection of houses in the unsewered districts.

In April, 1923, the Department introduced a Voluntary Dustbin Hiring Scheme. This scheme which is self-supporting enables property owners to hire dustbins from the Department at a small charge per annum, and during the three years since its inception 2,723 owners have hired no less than 19,876 dustbins.

The value of this Hire Scheme from a health point of view lies in the fact that as bins become dilapidated they are renewed immediately by the Department and the old, unsatisfactory method of serving notices, with all the attendant delays, is done away with.

SANITARY INSPECTION.

The table below shows the number of visits paid by the general Sanitary Inspectors, and the number of defects found for which notices were served.

	Number of visits paid by inspectors.	Number of defects for which notices were served.
1917	94,860	33,419
1918	95,036	27,596
1919	111,379	56,611
1920	113,315	60,802
1921	119,147	62,497
1922	134,516	86,938
1923	143,866	104,210
1924	148,199	123,573
1925	124,024	104,735

The next table gives fuller details of the character of the work done.

No. of visits and revisits paid:—

General House Inspection	5,333
Infectious Diseases	9,207
Nuisances or Complaints	29,984
Work ordered	45,804
Work in progress	18,712
Inspection of Dirty Courts	2,621
Manure Receptacles	642
Smoke or Water Tests	829
Tents, Vans and Sheds	296
Offensive Trades	56
Ice Cream Vendors	904
Rats Order	767
Calls on Owners or Agents	5,529
Other Purposes	3,340
Total	124,024

Nuisances, etc., reported:—

Houses to be disinfected after Scarlet Fever	1,687
,, ,, ,, Diphtheria	1,910
,, ,, ,, Typhoid Fever	53
,, ,, ,, Other Diseases	10
Repairs to Houses	69,257
Houses to be cleansed	5,550
Houses to be provided with better ventilation	51
Houses to be provided with separate water supply	310
Cases of overcrowding to be remedied	41
Houses to be provided with Damp Courses	121
Water to be removed from Cellars	381
Spouting to be repaired or disconnected	4,036
Rain Water Cisterns to be disconnected or abolished	69
Ashpit Privies to be converted to Water Closets	5
Pan Privies to be converted to Water Closets	14
Privies and Closets to be limewashed	599
Water Closets to be repaired or reconstructed	3,752
Additional Water Closets to be provided	1,407
Ashplaces to be repaired or limewashed	188
Soilpipes to be repaired or removed	29
Urinals to be put in order or closed	48
Drains to be relaid or repaired	1,461
Drains to be opened and cleansed	6,474
Gully Traps to be provided	245
Interception Traps to be provided on main drains	46
Premises to be supplied with additional drains	145
Drains in cellars to be disconnected or abolished	13
Sink Bend Pipes to be repaired or affixed	972
Sanitary Sinks to be provided	330
Yards to be paved	202
Yards to be repaired	882
Courts or Yards to be cleansed by Tenants	82
Houses to be cleansed by Tenants	55
Wash Houses to be repaired or limewashed	1,804
Keeping of fowls to be discontinued	54
Nuisances from swine and swine styes abated	39
Accummulations of rubbish, manure, etc., to be removed ...	299
Manure receptacles to be provided or repaired	51
Dangerous premises to be reported to City Surveyor's Department	672
Defective Fittings to be reported to Water Department ...	1,002
Other Work to be done	389
Total	104,735

In connection with the defects discovered notices were issued as follows:—

Preliminary notices	15,823
Reminders	1,519
Statutory notices	3,596

In 148 instances a summons was issued. In 27 instances an order to do the work and pay the costs of the same was made; in the remaining 121 cases the work had been commenced by the time the summons was heard, and the defendant was ordered to pay the costs of the summons.

COURTYARDS.

The two Inspectors who are appointed to visit courtyards and see that the closets and drain traps are in good working order, made 94,099 inspections of water closets. In 57,268 instances the closets were locked up, and in 36,831 they were open. In 123 instances the closet was dirty and in 258 defective.

Certain courtyards are cleansed periodically by the staff of Court Cleansers whose work during the year is set out in the following figures :—

Courts cleansed (paid)	12,856
Courts cleansed (free)	10,011
Houses stripped	37
Water closets inspected	101,961
Water closets opened	6,775
Water closets cleansed	71,211
Sheds washed	26,255
Drain traps cleansed	158,941
Drains opened	5,335

ATMOSPHERIC POLLUTION.

The extent to which the products of combustion exist in the air of any large city has three chief influences on the inhabitants of the district—

1. It is prejudicial to health.

2. It causes a very great deal of unnecessay labour and cleansing.

3. It limits the growth of many plants, and, therefore, hinders what is beautiful or useful in town gardens.

By far the most important of these is the fact that all smoke or dust in the air shuts out, in direct proportion to its amount, the ultra violet rays and prevents them from reaching the dwellers in the area. The absence of these rays for the greater part of the day lowers vitality, and by so doing renders most people susceptible to ailments which they themselves would not associate with the absence of sunlight.

This deleterious effect is for the most part produced by the very light and minute particles of soot which are carried high up in the air and form by their presence an effective barrier to the sun's rays. It is possible to demonstrate this even when with unaided eyes the sky looks clear over the City.

It is said by Professor Cohen, of Leeds, as a result of a long series of experiments that approximately 6 per cent. of the carbon consumed in a factory fire or in a domestic fire is passed up the chimney and sent into the air as soot.

In addition to soot, there is a very definite amount of tar derived from coal combustion. This tar coats our windows, and causes the soot and dust to adhere to them.

There is also from the combustion of coal a certain amount of sulphurous acid thrown into the air. This sulphurous acid is soon converted into sulphuric acid, and it produces a considerable amount of damage to metal and stoneware articles by producing chemical changes, rusting, and decay. Such acid has also a very prejudicial effect on vegetation. In the central areas of a town the concentration of acid on the leaves of plants kills the plants in course of time.

Many calculations have been made of the extra cost for washing and cleaning in a town cottage, compared with that of a country cottage. Every town dweller, however, is familiar with the difference which exists between the cleanliness of the town and that of the country.

The remedy lies in getting rid of the use of soft coal for open domestic fires and the more careful and economical use of such coal for commercial purposes. For the present the abolition of the use of soft coal in open domestic fires is a remedy which would be generally regarded with disfavour, but it is one which is not so unreasonable as would at first sight appear, because there is nothing on which we spend money so uneconomically and wastefully as that of heating a dwelling room by means of an open fire. Probably from 90 to 95 per cent. of the cost is wasted.

Pending the time when the public will demand the abolition of the open fire, great strides can be made in the heating of dwelling houses by the use of hot water pipes, of gas fires, of electric radiators, or of smokeless fuels of one kind or another. In the case of commercial processes much can be done by the substitution of electric current or gas for power purposes, metallurgical purposes, and many other processes where heat is required.

It must be the duty of everybody to limit the amount of smoke from his dwelling house. In cities cooking by gas has become almost universal. So far the gas fire for heating purposes has not reached the same stage of perfection as the gas cooker, but improvements are daily being brought out, which may in course of time commend themselves to all.

Birmingham has made great strides in the direction of cleansing the atmosphere, and these strides have been largely due to the active part played by both the Gas and Electric Supply Committees in backing up the work of the Public Health Department.

The Gas Department now supply gas to no less than 2,357 gas engines, with a total horse power of 51,233. Formerly much of the work done by these gas engines was done by steam boilers. There are no less than 156 different varieties of manufacturing processes in which gas is now used where heating by coal was formerly practised.

In addition to the gas supplied for manufacturing purposes by the Gas Department, there are no less than 41 separate gas plants where the manufacturer makes his own gas.

In regard to domestic heating, there are 83,000 gas fires and 185,000 gas cookers in use in the City. It can be easily imagined what the effect of returning to the old-fashioned method of cooking by coal ranges would be in regard to the production of black smoke. The use of gas for domestic purposes is making great progress, no less than 11,529 gas fires and 6,583 gas cookers being fixed by the Birmingham Gas Department during 1925, and the Gas Department are at the instigation of the Public Health Department endeavouring to enable the dwellers in the smallest houses in our courtyards to use gas for cooking purposes.

Similarly, the Electric Supply Department are aiding in the prevention of black smoke. There are 290 large power consumers and 25,000 smaller factories and workshops taking electric current for power purposes in the City. The large consumers each take from 100-h.p. to 7,200-h.p., that is to say, an enormous amount of coal would have to be consumed to produce the power now supplied from the electric generating stations.

In addition to this there is the power used for electric heating purposes, both in metallurgy and for domestic purposes.

Tests are made once a month of the amount of impurity in the atmosphere, and the results of these will be found in the Report of the City Analyst. These tests are made at—

1. Selly Oak Park.
2. On the top of the Central Post Office, Birmingham, where a large amount of smoke is obtained from the railway tunnel immediately below, and
3. Aston Park.

The results, however, do not give a very good idea of the average atmospheric impurity over the City, and do not indicate how much better it is now than formerly.

FACTORY CHIMNEY SMOKE.

Birmingham is fortunate in possessing a local Act of Parliament passed in 1883, which gives much more satisfactory results than can be obtained by putting in operation the general law of the country. The operative words of the Section of the Act are, " Every furnace or fireplace used in the working of engines or any mill, factory, brewery, bakehouse, etc., shall be so constructed as to consume the smoke arising from the combustibles used therein."

There are approximately 1,028 factory chimneys in the City, which at times emit black smoke. These are chimneys in connection with a very large variety of factories, but the chief offenders are those in connection with metal trades, tube works, metal rolling, wire mills, edge tool works, engineers, motor car manufacturers, and similar metallurgical processes.

During the year 1925, 208 of these chimneys were reported as emitting black smoke. The whole time of two inspectors is engaged in observations on black smoke from chimney stacks. The observations are made for one hour or such shorter period as would indicate the emission of excessive amounts of black smoke.

The following figures indicate the type and scope of the work done by the two Inspectors during 1925:—

Total number of observations of one hour's duration	4,869
Cases reported for excessive black smoke:—	
From boiler fires	97
From boilers and furnaces	18
Metallurgical furnaces	93
Total	208

Cases in which proceedings were instituted in Court	86
Convictions obtained	86
Total amount of fines	£184 0 0
Average per case	£2 2 9
Cases dealt with by cautionary letter	120

GRIT NUISANCE FROM FACTORY CHIMNEYS.

Within recent years many manufacturers have been advised that they could obtain cheaper power for the factory by adapting their boilers to burn coal dust and inferior slack in their boilers. It was said that by the use of sufficient draught this could be done without the provision of a high chimney and that no black smoke would be occasioned.

Most of the above statements are correct, but it was not pointed out that such a process, if efficiently worked, sent out a large amount of grit. This grit penetrates into dwelling houses and makes everything feel gritty. It gets into the eyes of the residents and into their food, and nothing is free from it within a considerable distance from the works.

By the Birmingham Corporation Act of 1922, Section 79, the powers conferred by the general law and by the local Act of 1883 were made to apply to chimneys emitting grit or gritty particles. No prosecutions have yet been instituted, but several firms have had to alter their plant at the request of the Public Health Department. It is impossible by the unaided eye to see the grit coming out of a chimney. By taking accurate observation of the direction of the wind and at the same time placing papers smeared with a slow drying varnish in various positions, it has been possible in every case up to the present to determine the chimney emitting the grit and to catch the grit and estimate its amount. The use of a field glass or telescope for observation of the chimney top gives valuable confirmation.

COMMON LODGING HOUSES.

These are inspected partly during the day and partly at night by Inspector Childs, who, in addition, carries on the inspection of canal boats.

The following tabular statement gives an idea of the work done.

Number of houses on register	31
Number of lodgers allowed	2,151
Number of visits by day	1,423
Number of visits by night	190
Average number of persons found	1,825

The contraventions of bye-laws and nuisances found comprised such matters as the need for better bedding, general sanitary defects, dirtiness of rooms and passages, windows not opened, insufficient washbasins and chamber utensils and other similar matters. All these were attended to without delay.

HOUSES LET IN LODGINGS.

The apparent intention of Parliament in permitting the Registration of these houses under the Public Health Act, 1875, and in permitting local authorities to make regulations for their control was to ensure reasonable accommodation for a very poor and often degraded class of the community who in normal times desired nothing better than a poorly furnished room for living and sleeping. The house shortage whereby a large number of respectable artisans have had to endure this type of dwelling, has made it exceedingly difficult to distinguish between the two groups. Registration may entail inspection by day and night—an inquisition which is properly resented by self-respecting people. On the other hand there are some house farmers who are guilty of making very poor provision for the decent class and at the same time of charging exorbitant amounts.

It has not been possible yet to put in force the Birmingham Regulations in their entirety, for if done, many of these houses would be closed. If it were possible a great improvement would be effected.

Number of houses on register	651
Number of registered rooms in the houses	3,025
Number of these let as single rooms	1,284
Number let two or more rooms together	662
Certified accommodation	6,307 persons
Number of visits to the 651 houses	3,059

Notices for repairs	2,804
,, ,, overcrowding	27
,, ,, cleansing	563
,, ,, provision for cooking	372
,, ,, fire extinguishers	195
,, ,, lighting on stairs	162
,, ,, repairs to bedding	42

CANAL BOATS.

The following is a copy of the annual report required to be made under the Canal Boats Act:

The Council House,
Birmingham,
January 21st, 1926.

Gentlemen,

In compliance with Section 3 of the Canal Boats Act, 1884, I beg to submit the annual report of the work done by this Department during the year 1925 under the Canal Boats Acts 1877 and 1884, and the regulations under these Acts.

The Canal Boats Inspector for the City is Inspector W. G. E. Childs, who combines with this work the duties of Inspector of Common Lodging Houses. His salary for the joint appointment is 60/- per week and bonus, with uniform and allowance for cycle.

Inspection of Boats.

During the year 1925, the number of boats inspected on the canals within the City area was 1,150, and the number of inspections during each quarter is shown as follows:—

During the first quarter of the year	299	boats were examined.
,, second ,, ,,	296	,, ,,
,, third ,, ,,	273	,, ,,
,, fourth ,, ,,	282	,, ,,
Total ...	1,150	

The 1,150 boats inspected were registered for the accommodation of 3,712½ persons and when inspected were found to be carrying 1,414 men, 816 women and 798 children, a total of 3,028 persons, represented in terms of adults as 2,629.

The following table shows the number of boats inspected during the last five years, giving the number of persons whom the boats were registered to accommodate and the actual number of occupants at the time of inspection.

Year.	No. of boats inspected.	Registered to carry (adults).	Actually occupied by Men.	Women.	Children.	Total occupying.	Equivalent to adults.
1921 ...	1,037	3,311½	1,224	773	817	2,914	2,542
1922 ...	1,093	3,414	1,319	842	873	3,034	2,743
1923 ...	1,107	3,730	1,396	878	960	3,234	2,914
1924 ...	1,127	3,590	1,358	833	872	3,063	2,772
1925 ...	1,150	3,712½	1,414	816	798	3,028	2,629

Of the 1,150 boats inspected during the year it was found that 1,054 or 91 per cent. were in good condition and conforming with the Acts and Regulations, while in 96 or 9 per cent. of the total, various contraventions were found. These are classified thus:—

Boats with one contravention each	32	making total contraventions	32
,, ,, two ,, ,,	31	,, ,, ,,	62
,, ,, three ,, ,,	26	,, ,, ,,	78
,, ,, four ,, ,,	7	,, ,, ,,	28
... Totals ...	96		200

Complaint notes were duly served on the owners in all cases.

During the year certificates were returned by owners, signed by various Canal Boat Inspectors, showing that 163 complaints had been remedied.

The following table shows the number and character of contraventions found and remedied during the year.

Contraventions referring to	Outstanding and brought forward from 1924.	Found during 1925.	Remedied during 1925.	Carried forward to 1926.
Cabins requiring painting	11	55	43	23
,, ,, repairs	8	45	39	14
,, ,, marking	11	46	36	21
Cabins leaking	3	20	17	6
Not producing certificates	1	5	5	1
Overcrowding	—	7	5	2
Separation of sexes	—	6	6	—
Registrations	—	11	7	4
Dirty Cabins	—	1	1	—
Using flyboats as ordinary	—	1	1	—
Water vessels	—	3	3	—
Pumps	—	—	—	—
Totals ...	34	200	163	71

It has not been necessary during the year to take any court proceedings under the above Acts or the Canal Boat Amendment Regulations, 1925.

INFECTIOUS DISEASES.

No cases of infectious disease were notified among the boat population during the year.

REGISTRATION OF BOATS.

There were eight boats registered during 1925 in Birmingham. Five registrations were cancelled, thus leaving a total of 537 boats on the Birmingham Register on December 31st, 1925.

The registrations were as follows:—

New motor boats registered	3
New ordinary boats registered	3
Ordinary boats re-registered	2
	8
Registration cancelled	5
Increase	3

These re-registrations were due to change of ownership and structural alteration. They were previously registered at Birmingham.

The number of boats on the Birmingham Register for the last five years has been as follows:—

December 31st,	1921,	Boats on Register	505
,,	1922	,, ...	516
,,	1923	,, ...	526
,,	1924	,, ...	534
,,	1925	,, ...	537

The 537 boats on the register at present are classified as follows:—

Ordinary boats	473
Steam boats	12
Motor Boats	52
	537

I am, Gentlemen,

Your obedient servant,

W. H. DAVISON, M.B., D.P.H.

Senior Assistant Medical Officer of Health.

FACTORIES AND WORKSHOPS.

Three Inspectors, two men and one woman, are engaged in carrying out the duties devolving upon the Public Health Department under the Factory and Workshop Acts. Their work is summarized in the following table:—

I. INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

Premises. (1)	Number of Inspections. (2)	Number of Written Notices. (3)	Number of Occupiers Prosecuted. (4)
Factories (including Factory Laundries) ...	1,128	106	—
Workshops (including Workshop Laundries) ...	5,500	260	—
Workplaces (other than Outworkers' premises)	295	21	—
Re-Visits	3,338	—	—
Total	10,261	387	—

II. DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars. (1)	Number of Defects. Found. (2)	Remedied. (3)	Referred to H.M. Inspector. (4)	Number of offences in respect to which Prosecutions were instituted (5)
Nuisances under the Public Health Acts :—*				
Want of cleanliness	1,277	1,274		
Want of ventilation	16	15		
Overcrowding	6	6		
Want of drainage of floors	3	3		
Other nuisances	646	635		
Sanitary accommodation :				
Insufficient	42	41		
Unsuitable or defective	947	937		
Not separate for sexes	53	53		
Offences under the Factory and Workshop Acts :				
Illegal occupation of underground bakehouses (s. 101)	—	—		
Other offences	1	1		
(Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921)				
Total	2,991	2,965	—	—

*Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

SHOPS ACTS.

The total number of shops observed and visited during 1925 was as follows:—

Shops observed without entering	22,518
Systematic visits to shops	1,504
Re-visits	350
Special visits	658
Special night observations by temporary inspectors	2,503

Infringements found:—

Early closing notice not exhibited	123
Exempted trade notice not exhibited	218
Young persons' notice not exhibited	1
Assistants' half-holiday not exhibited	47
Assistants' meal times not exhibited	3
Change of early closing day not notified	61

Prosecutions	153

(a) *Butchers' Closing Order.*

1 case fined £10.
5 cases fined £5 each.
1 case fined £3.
9 cases fined £2 each.
33 cases fined £1 each.

(b) *Shops Act*, 1920.

2 cases fined 15/- each.
52 cases fined 10/- each.
46 cases fined 5/- each.
3 cases fined 2/6 each.
1 case paid the costs.

SCHOOLS.

The Minister of Health's Memorandum requires that the report should deal with the sanitary condition and water supply of schools, the health of scholars and the prevention of infectious diseases.

The Report of the Education Committee, 1914-1924, p. 248, and the Annual Reports of Dr. Auden deal with many of these problems in considerable detail.

The sickness of the children judged by the percentage of absences is still unnecessarily high, being about 11 per cent.

Up to the present time it has not been possible to ascertain the cause of absence in a sufficiently accurate manner to enable means to be taken to prevent it or indeed to investigate the probable causes. With from 12,000 to 14,000 children always absent the material ought to yield valuable information if properly dealt with.

The school buildings vary in their suitability in Birmingham as in almost every other city, some are extremely good and meet all modern requirements, others are far from meeting the requirements of modern education because they are old and out of date. The sanitary conveniences are being remodelled in the older schools where the repulsive trough system was in operation.

The number of children who ought to be taught in the open-air is considerable and while the number of places in open-air schools has greatly increased in recent years there seems to be no reason why a certain number of open-air classrooms should not be provided in every school or in every other school. This no doubt will come as a result of the experience now being gained. Such classrooms would be almost useless unless the necessary extra wraps as well as some extra food can be provided in winter.

It is very important that more children should be kept in the open-air.

IV. HOUSING IN 1925.

NEW HOUSES.

Considerable progress has been made in the building of new houses to make up the deficiency caused by the cessation of building during and following the great war.

The total number of new houses built in the City during the year and certified as fit for habitation was 4,840. In a report to the City Council on February 2nd, 1926, it was stated that the Municipality had erected 9,038 houses up to Dec. 26th, 1925.

NEW HOUSES BUILT.

The new houses built in Birmingham during the last six years have been as follows :—

	No. of houses erected by private enterprise.	Corporation houses.	Total.
1920	244	407	651
1921	426	970	1,396
1922	382	902	1,284
1923	556	1,508	2,064
1924	1,201	1,663	2,864
1925	1,774	3,066	4,840
Total ...	4,583	8,516	13,099

The rate of building in Birmingham of new dwellings together with similar figures for three other large cities has been as follows.

		New houses per 100,000 of the population.			
		Birmingham.	City No. 1.	City No. 2.	City No. 3.
Average yearly number of houses 1901-1910. Prior to Finance Act, 1909.		377	323	310	424
1911	Insecurity of Investment	149	176	220	190
1912		130	125	148	151
1913		178	109	136	115
1914		158	119	101	120
1915	Building stopped by the War	71	71	55	84
1916		54	26	16	85
1917		38	30	2	12
1918		1	—	1	2
1919		5	—	1	13
1920	Building recommenced by subsidy, etc.	72	34	10	86
1921		152	224	22	232
1922		138	280	269	156
1923		221	213	146	123
1924		303	78	185	164
1925		508	189	224	389

The Wards in which houses have been built during the last six years (1920-1925) are shown below :—

	Ward.	House erected by private enterprise.	Corporation Houses.	Total.
Central Wards.	St. Paul's	1	—	1
	St. Mary's	3	—	3
	Duddeston and Nechells ...	—	—	—
	St. Bartholomew's	1	—	1
	St. Martin's and Deritend ...	—	—	—
	Market Hall	—	—	—
	Ladywood	—	—	—
		5	0	5

	Ward.	House erected by private enterprise	Corporation Houses.	Total.
Middle Ring.	Lozells	—	—	—
	Aston	14	4	18
	Washwood Heath	48	1698	1746
	Saltley	9	909	918
	Small Heath	14	316	330
	Sparkbrook	2	—	2
	Balsall Heath	3	—	3
	Edgbaston	261	—	261
	Rotton Park	82	—	82
	All Saints'	7	—	7
		440	2927	3367
Outer Ring.	Soho	55	—	55
	Sandwell	81	273	354
	Handsworth	64	110	174
	Erdington North	405	1575	1980
	Erdington South	175	538	713
	Yardley	307	236	543
	Acocks Green	390	673	1063
	Sparkhill	855	1214	2069
	Moseley and King's Heath	578	499	1077
	Selly Oak	286	0	286
	King's Norton	144	171	315
	Northfield	599	284	883
	Harborne	199	16	215
		4138	5589	9727
	Total	4583	8516	13099

The great majority of the new houses—9,727 out of 13,099—have been erected in the outer ring of suburban wards. These are the wards in which low mortality rates are regularly recorded and there is no doubt that the transference of so large a number of families into such healthy districts will have a beneficial effect on the mortality statistics for the City.

OVERCROWDING.

A good deal of doubt has been expressed as to whether overcrowding is as general and the conditions of life are as bad as appears to be indicated by the comparatively small number of cases to which public attention gets directed.

Precise information was therefore obtained in regard to two representative areas, each containing about 500 houses.

The localities for investigation were selected in quite a haphazard fashion by indicating on a map two areas—one where it was known that small court-yard back-to-back houses prevailed—the other where through houses of an old pattern in a crowded area existed.

The investigator was instructed to obtain information in regard to the age and family relationship of each occupant. He was asked to avoid complicating the return by excluding shops or other large houses that did not conform to the general type investigated. He also excluded the registered houses sublet in lodgings.

The general results are set out in the following table.

POOREST CLASS AREA. 527 HOUSES.

	Houses with 1 bedroom.	Houses with 2 bedrooms.	Houses with 3 bedrooms.	More than 3 bedrooms.	Totals.
Houses visited ...	14	444	57	12	527
No. " Overcrowded "	5	119	6	—	130
Percentage overcrowded	36%	27%	11%	—	25%

ARTISAN AREA—513 HOUSES.

Houses visited ...	0	0	510	3	513
No. " Overcrowded "	—	—	11	0	11
Percentage overcrowded	—	—	2%	—	2%

An instruction was given as to what was to be considered to be overcrowding on rather different lines from that usually employed.

Overcrowding was recorded in those cases where there were " more than four persons per bedroom or where persons of opposite sexes over the age of 13 years had to occupy the same room."

It will be noted that on this low basis 25 per cent. of the houses in the poor class area were overcrowded and that only 2 per cent. were overcrowded in the artisan area. The bedrooms in many of these houses are small. Many of them are what would be considered sufficient only for a bed for a single person. In many of the bedrooms when two beds are erected there is no room for any other article of furniture and scarcely any room left for a passage between the beds.

The following table shows the conditions regarding overcrowding in the two areas in houses of various sizes.

	NUMBER OF HOUSES WITH :—											
	1 Bedroom			2 Bedrooms			3 Bedrooms			4, 5 and 6 Bedrooms		
	Area I.	Area II.	Total	Area I.	Area II.	Total	Area I.	Area II.	Total	Area I.	Area II.	Total
1 Inmate	1	—	1	9	—	9	—	1	1	—	—	—
2 Inmates	3	—	3	56	—	56	6	31	37	2	—	2
3 ,, ...	5	—	5	50	—	50	5	82	87	1	1	2
4 ,, ...	2	—	2	56	—	56	10	100	110	1	1	2
5 ,, ...	2	—	2	76	—	76	4	100	104	3	—	3
6 ,, ...	—	—	—	81	—	81	11	84	95	—	1	1
7 ,, ...	1	—	1	45	—	45	6	50	56	3	—	3
8 ,, ...	—	—	—	41	—	41	4	30	34	1	—	1
9 ,, ...	—	—	—	14	—	14	4	13	17	—	—	—
10 ,, ...	—	—	—	9	—	9	4	11	15	1	—	1
11 ,, ...	—	—	—	3	—	3	1	2	3	—	—	—
12 ,, ...	—	—	—	1	—	1	1	6	7	—	—	—
13 ,, ...	—	—	—	2	—	2	1	—	1	—	—	—
16 ,, ...	—	—	—	1	—	1	—	—	—	—	—	—
Total No. of houses visited	14	Nil	14	444	Nil	444	57	510	567	12	3	15
No.of houses overcrowded												
(over 4 persons per room)	1	—	1	9	—	9	1	—	1	—	—	—
(No separation for sexes)	2	—	2	89	—	89	5	11	16	—	—	—
(both on numbers and sex separation) ...	2	—	2	21	—	21	—	—	—	—	—	—

From the above table it will be seen that

(a) 11 houses were overcrowded because they had more than four persons per bedroom.

(b) 107 houses were overcrowded because they did not permit of decent separation of the sexes.

(c) 23 other houses were overcrowded both on the grounds that they had over four persons per room and also did not allow separation of the sexes.

The houses in which more than one family resided are indicated in the next statement.

	Number of Houses with :—									
	1 Bedroom	2 Bedrooms			3 Bedrooms			4, 5 and 6 Bedrooms		
		Area I.	Area II.	Total	Area I.	Area II.	Total	Area I.	Area II.	Total
Two families in house ...	Nil.	67 (5)	—	67 (5)	12	89 (3)	101 (3)	2	1	3
Three ,, ,, ,, ...		4	—	4	1	5 (3)	6 (3)	1	—	1
One family & 1 relative ...		40	—	40	8	43	51	—	1	1
,, ,, 2 relatives ...		2	—	2	1	8 (1)	9 (1)	—	—	—
,, ,, 3 ,, ...		—	—	—	—	2	2	—	—	—
,, ,, 1 Lodger ...		9 (2)	—	9 (2)	2 (1)	27 (1)	29 (2)	2	1	3
,, ,, 2 Lodgers ...		—	—	—	—	5 (2)	5 (2)	—	—	—
,, ,, 3, 4, & 5 ,, ...		—	—	—	1 (1)	2 (1)	3 (2)	1 (1)	—	1 (1)
,, ,, 1 relative and 1 lodger ...		2 (1)	—	2 (1)	—	3 (1)	3 (1)	—	—	—
Two families & 1 relative ...		1	—	1	2	3	5	1	—	1
,, ,, 2 relatives ...		—	—	—	1	1	2	—	—	—
,, ,, 1 lodger ...		8 (5)	—	8 (5)	—	8	8	—	—	—
,, ,, 2 lodgers ...		—	—	—	—	1	1	—	—	—

(Small figures in brackets show number of " families " consisting of 1 person only).

This table shows that in 444 houses of the smaller type where there were only two bedrooms (often a bedroom and an attic) there were 67 cases where two families were in the house, 4 cases with 3 families, and 8 cases of two families and a lodger.

In the larger houses, too, where there were three bedrooms, there were 101 cases in which two families were living in one house, and six cases with three families in the same house. It will be noted that many of these houses were uncomfortably crowded by the two families and lodgers, although they would not be classed as overcrowded on the definition used.

It is not altogether easy to select examples of overcrowding which give a fair example of the conditions. Six of the worst have been set out below and six of the type that might be called average examples. The statement shows the number of males and females (with their ages) and the dimensions of the bedrooms occupied by them.

Six Worst Cases of Overcrowding.

(Brackets indicate separate families).

1.	Tenant		M.	F.	M.	F.	M.	F.	F.	M.		Grandsons			M.	F.	F.	M.	M.
	F. 65		33	33	10	8	6	4½	3	7/12		13	11		44	38	7	6	5/12

2 Bedrooms : 10′ 0″ × 12′ 0″ and 9′ 6″ × 12′ 0″

2.	M.	F.	M.	F.	M.	F.	M.	F.	F.	M.
	?	?	19	17	15	14	10	8	4	2

2 Bedrooms : 11′ 6″ × 14′ 0″ and 16′ 0″ × 12′ 0″

3.	M.	F.	M.	F.	F.	M.	F.	F.		M.	F.	M.	F.
	45	47	16	13	13	10	8	5		23	22	5	1

2 Bedrooms : 12′ 0″ × 9′ 6″ and 9′ 0″ × 6′ 6″

4.	M.	F.	F.	M.	F.	M.	M.	F.		M.	F.	M.
	?	?	16	12	7	6	3	4dys		?	?	2½

2 Bedrooms : 14′ 0″ × 12′ 0″ and 15′ 6″ × 13′ 0″

5.

M.	F.	M.	F.	F.	M.
?	?	24	23	14	3

M.	F.	F.	F.
?	?	5	4

2 Bedrooms : 11′6″ × 14′0″ and 16′0″ × 12′0″

6.

M.	F.	M.	F.	M.	M.	M.	F.	M.	F.	F.	M.	M.
50	46	20	18	16	14	11	8	6	4	3	$1\frac{2}{12}$	$1\frac{2}{12}$

2 Bedrooms : 13′6″ × 11′0″ and 14′0″ × 12′0″

SIX ORDINARY CASES OF OVERCROWDING. (Same Area).

1.

M.	F.	M.	F.	M.	M.	F.	M.	F.
47	45	23	15	12	9	7	5	4

2 Bedrooms : 14′0″ × 13′0″ and 14′0″ × 14′0″

2.

M.	F.	F.	F.	F.	M.	F.	M.	M.
39	34	16	15	13	10	7	6	2

2 Bedrooms : 11′6″ × 8′6″ and 9′0″ × 7′0″

3.

M.	F.	M.	M.	M.	F.	F.	F.	F.	F.
?	?	20	19	14	12	9	6	3	$\frac{3}{4}$

2 Bedrooms : 14′0″ × 13′0″ and 16′0″ × 12′0″

4.

M.	F.	M.	F.	F.	M.	M.
40	39	18	17	15	14	13

2 Bedrooms : 12′6″ × 11′0″ and 11′6″ × 13′0″

5.

M.	F.	M.	F.	F.	M.	M.
54	48	24	19	17	13	8

2 Bedrooms : 10′0″ × 11′0″ and 9′6″ × 6′9″

6.

M.	F.	M.	F.	M.	F.	F.	F.
41	39	17	16	12	10	3	3

2 Bedrooms : 12′0″ × 9′6″ and 9′6″ × 7′0″

SIZE OF THE FAMILY.

In the 527 small houses in Area No. 1, there were 455 families, and in Area No. 2, 437 families with children under 21 years of age and living at home. These families were made up as follows :—

Parent or Parents and	Area 1.		Area 2.
1 son or daughter	94	... ...	131
2 sons or daughters	95	... ...	108
3 ,,	81	... ...	72
4 ,,	83	... ...	69
5 ,,	44	... ...	28
6 ,,	32	... ...	15
7 ,,	13	... ...	8
8 ,,	7	... ...	2
9 ,,	4	... ...	2
10 ,, and over	2	... ...	2
	455		437

From the sample areas investigated it is not possible to estimate the number of houses in Birmingham which are dangerously or uncomfortably overcrowded but, obviously, the number would run into many thousands, probably as many as ten or twelve thousand. A majority of these people have not applied for a Municipal house because of the cost and they would be rejected if they did apply because of lack of means and lack of furniture to furnish a larger house for themselves.

NEED OF SMALL FURNISHED HOUSES.

As a means of meeting in some small way the needs of these people, the following report was made during the year under review.

"In compliance with your request I have considered very carefully the question of making a Representation of an area in Birmingham in order that it might be reconstructed at the present time. Much as I desire that a beginning should be made with this work, I am convinced that to do so now would be premature and would according to the extent of the scheme hinder the erection of more houses, because bricklayers and carpenters would be needed for any work of reconstruction just as much as in the erection of new houses.

"The great need at the present time is more houses. It is almost true to say that life in the old worn out slum dwellings is relatively satisfactory compared with the conditions under which poor people are compelled to live when they cannot get a house of any kind. As you know, most of these latter people are in lodgings which consist of one or two rooms only. Probably nobody gets so much information as I do in regard to distressing cases. Many of these are people who, in addition to being poor, are dirty and thriftless, and are such that no landlord in Birmingham would let them a house, but they have all got children. The room they occupy is very often an attic, and frequently the age of the children make the conditions of life liable to extreme indecency. They pay exorbitant rents for quarters without a water supply, without proper cooking facilities, and very many of these rooms are approached by dangerous staircases.

"So long as there are people housed under the unwholesome conditions I have mentioned, I feel strongly that our efforts should be directed to building more houses so as to set free the poorer class of dwelling for these afflicted people.

"For some time I have been considering whether it was possible to devise something for a limited class which would be a temporary means of relieving the situation, and I put forward now the following tentative suggestions for consideration.

"The scheme should apply to the more or less poverty stricken families who lack furniture and

(a) In which there are young children living in overcrowded unwholesome conditions and

(b) Overcrowded families in rooms where there are likely to be conditions of indecency.

"We have adequate powers to reduce overcrowding, but it is nearly impossible to put these powers into operation at the present time, because a family has the greatest possible difficulty in getting other accommodation. No ordinary landlord will have them, because they are poor and have no furniture and are probably thriftless and dirty; and even if we took a case into court I do not think the Magistrates would make an Order for their compulsory ejectment under the conditions at present existing.

"It would be very unprofitable and probably undesirable to accept these as tenants for ordinary Corporation houses.

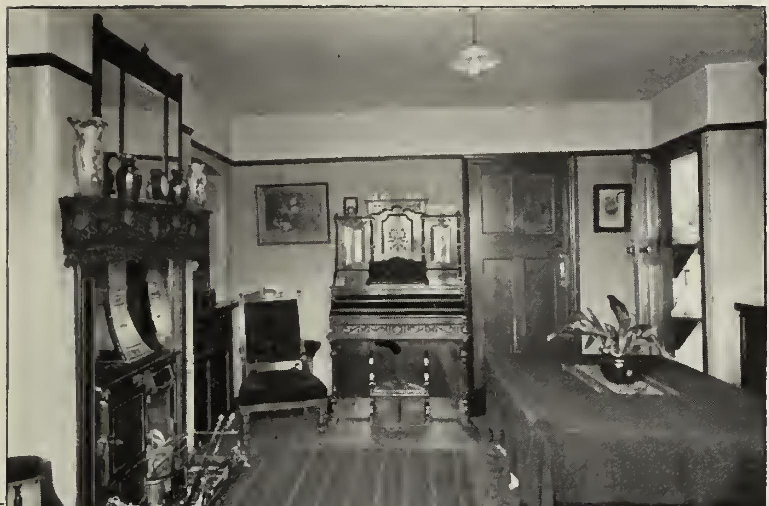
"I should like, however, to try an experiment of providing specially furnished houses to provide alternative accommodation for these families when they were turned out because of overcrowding.

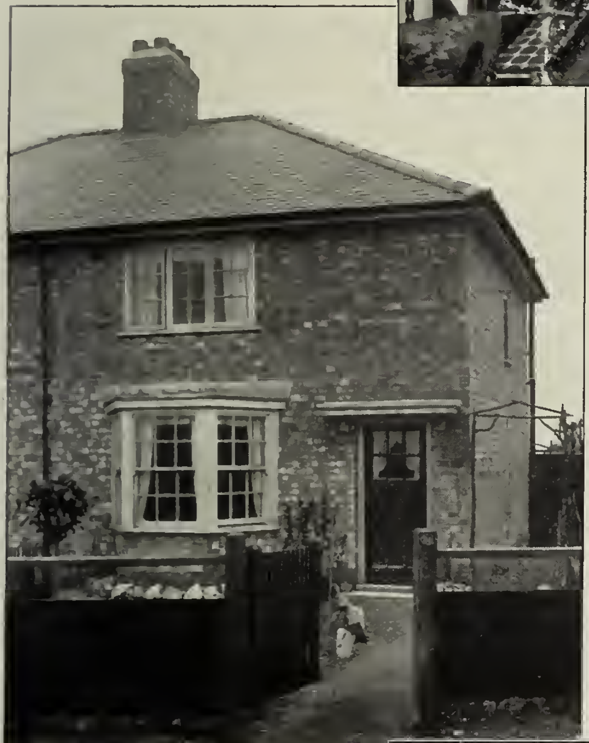
"The houses would have to be let furnished, and as in other similar lettings the rent would have to be paid in advance or the Corporation would take possession of the premises. Of course, due consideration would have to be given to any case of hardship arising from unemployment, sickness, etc., but I believe that if firmness and fairness were shown many of these people would pay regularly. Whenever they improved their characters they could be offered the tenancy of a Corporation house.

"I believe in the case of this special group it would be possible to erect the houses in rows of the bungalow type and to give the occupiers a large bed sitting room, a separate bedroom, a scullery, and a water closet, and to have the whole group supervised by a caretaker. The Houses should be regarded as emergency accommodation only, and probably after their use for the special purpose had ceased they might be let for old people."

As a result of the suggestion contained in the above report, the Public Works Committee have worked out a plan and propose to build one block of four small separate dwellings as an experimental sample. The block plan of these houses is indicated below.

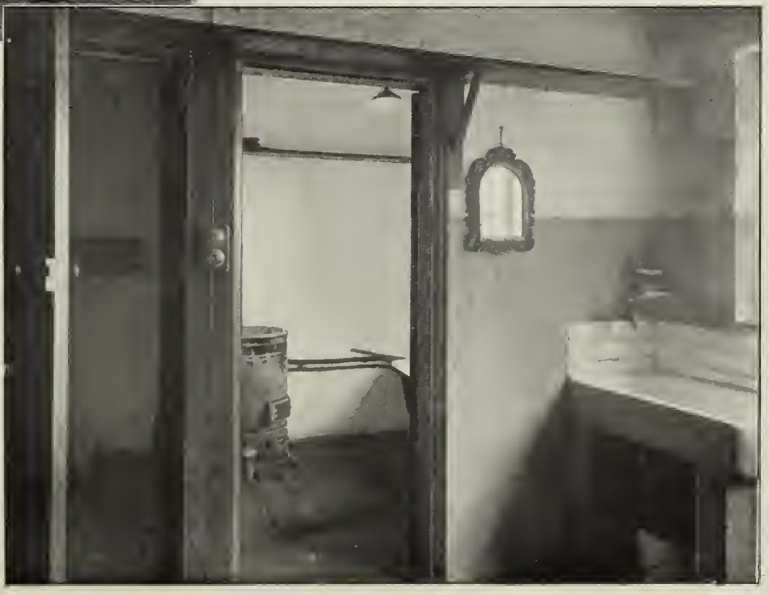
The Interior of Living Room.

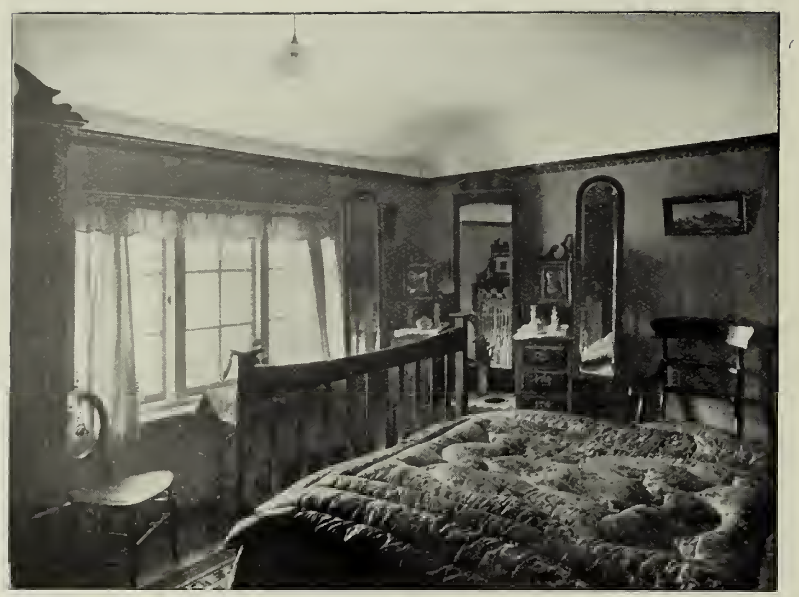




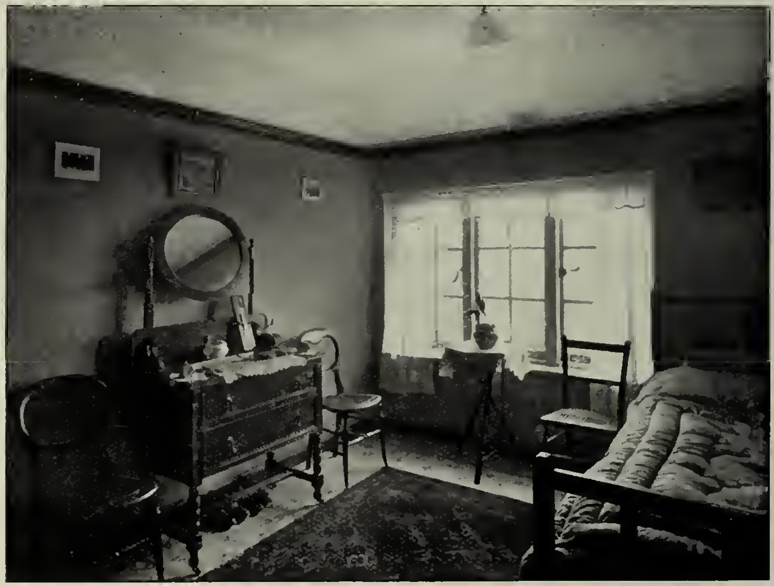
The Front of the House.

The Scullery, Bath Room, and Coal Store.

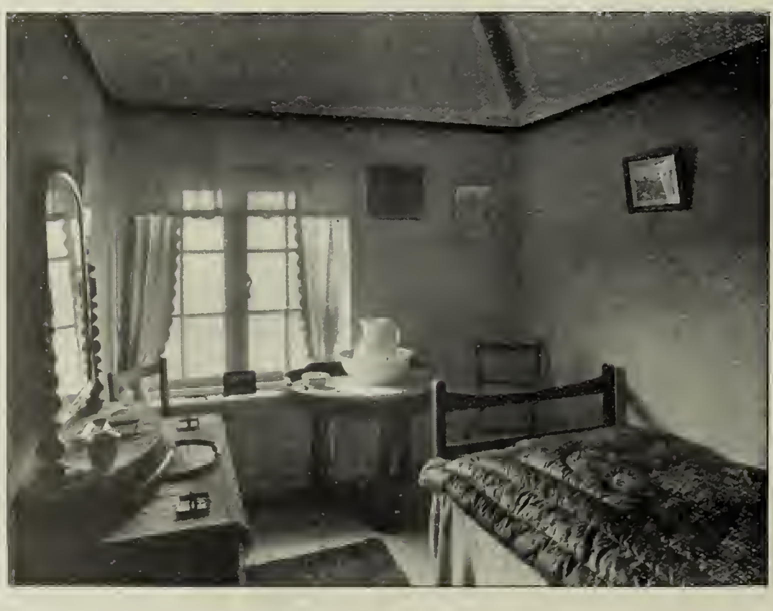




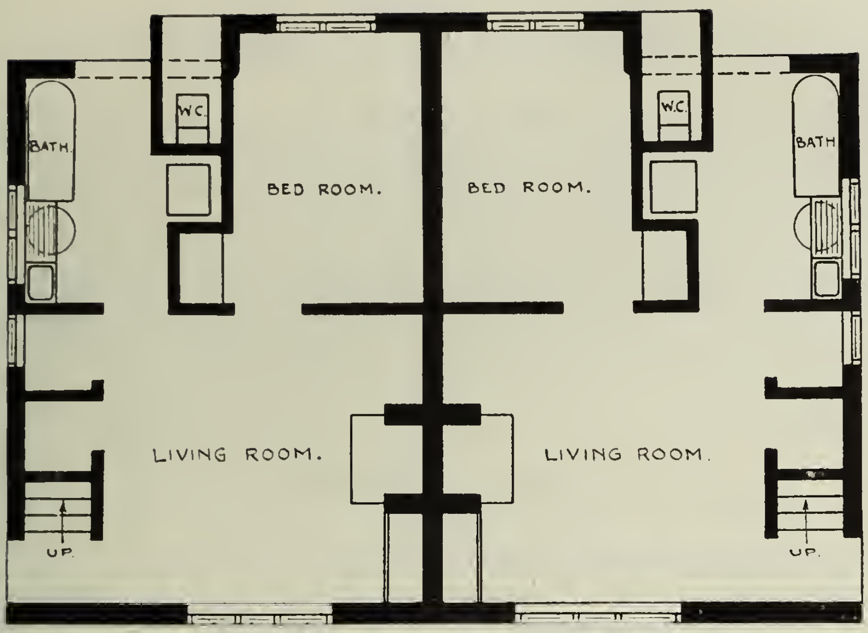
The Largest Bedroom.



The Medium-Sized Bedroom.



The Smallest Bedroom.



- GROUND FLOOR PLAN.

SHORTAGE OF HOUSES.

There is still a very serious shortage of dwellings for the labouring classes. If the experience of building in 1901-1910 be taken as meeting fully the demand, i.e., 377 new houses per 100,000 inhabitants, there must be on this basis a shortage of 30,000 dwellings. On December 31st there were registered with the Estates Department 24,840 applications for new houses, but this number does not include many of those of the poorer classes who at present are living in lodgings or where two families share a house fit only for one family.

The tradition in Birmingham before the War was that it was disreputable to have two families in a cottage house and there was no difficulty in maintaining the standard of one family for a house by serving notices for overcrowding whenever this was reported.

FITNESS OF HOUSES IN BIRMINGHAM.

At the Census of 1921 there were 193,606 houses in the City inclusive of hotels, institutions, offices, etc. The Census enumerators found that 42,988 houses had 1 to 3 rooms, 79,732 houses had 4 or 5 rooms, 66,270 had 6 to 8 rooms and 4,616 had 9 or more rooms.

So much attention is directed to slums that it is not sufficiently recognised that it is true to say that but for, say, 30,000 small, old back to back dwellings, the rest of the working classes are housed well in about 150,000 small houses. Most of the artisan dwellings are of 4, 5 or 6 rooms and have a good scullery and self contained garden. They are built in long rows and are, therefore, unsightly. A good many of them have fixed baths. Perhaps the most insanitary feature is the outshot scullery of two storeys which makes the living room in most cases dark and dismal.

The old back to back court yard houses are year by year to an increasing extent showing the effect of age. Most of them were built 100 years ago. They contain a living room and two bedrooms, small in size. The W.C.'s, wash-houses and yard space are used in common. Few of these houses have a water tap and sink inside the dwelling. The staircase is, in most of them, steep and dangerous and the woodwork and plaster work is worn out.

It would be perfectly easy to represent a large number of these houses as " unfit," but this means at the present time turning out the tenants without there being any houses into which they could go. It is hoped, however, that with the progress now being made in erecting new houses, it may soon be possible to set aside some new houses for those displaced when dwellings are demolished.

New Dwellings Now Being Erected.

The photographs attached show in a general way one of the smallest type of house now being erected.

For the sake of illustration a house has been selected which was purchased by an artisan through the Birmingham Municipal Bank. The inclusive rent of the house at the time of purchase was 11/2 per week. The purchase price was £372, and the legal costs £3 6s. 0d. The sum of £20 was paid in cash and the remaining £352 borrowed from the Municipal Bank to be repaid in monthly instalments extending over 20 years, with interest at 5 per cent. on the outstanding balance of the loan. In the first year after purchase the tenant will have to find 19/- per week, of which 13/- represents repayment of loan, with interest, and 6/- covers rates, ground rent and insurance. There will also be a small amount needed from time to time for repairs, but this will depend very largely on the care taken of the house. In each succeeding year the weekly payment will diminish by about 3d. per week, until at the end of 20 years the mortgage will have been paid off, and only the rates, ground rent and insurance will remain payable.

The following statement is inserted at the request of the Ministry of Health:—

Repairs to Old Dwellings.

HOUSING.

Number of new houses erected during the year 1925:—

(a) Total	4,840
(b) With State assistance under the Housing Acts, 1919, 1923 or 1924	
(1) By the Local Authority	3,066
(2) By other bodies or persons	1,396

1. Unfit Dwelling Houses.

Inspection—(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	47,943
(2) Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910	1,628
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	1
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation	43,105

2. Remedy of Defects without Service of Formal Notices.

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers	27,434

3. Action under Statutory Powers.

A. Proceeding under Section 28 of the Housing, Town Planning, etc., Act, 1919.

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	94
(2) Number of dwelling-houses which were rendered fit after service of formal notices—	
(a) By owners	83
(b) By Local Authority in default of owners	33
(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declaration by owners of intention to close	3

B. Proceedings under Public Health Acts.

(1) Number of dwelling-houses in respect of which notices were served required defects to be remedied	11,194
(2) Number of dwelling-houses in which defects were remedied after service of formal notices—	
(a) By owners	7,213
(b) By Local Authority in default of owners	35

C. Proceedings under Sections 17 and 18 of the Housing, Town Planning, etc., Act, 1909.

(1) Number of representations made with a view to the making of Closing Orders	17
(2) Number of dwelling-houses in respect of which Closing Orders were made	8
(3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	Nil
(4) Number of dwelling-houses in respect of which Demolition Orders were made	3
(5) Number of dwelling-houses demolished in pursuance of Demolition Orders	3

V. INSPECTION AND SUPERVISION OF FOOD.

THE MILK SUPPLY.

This is derived from farms outside the City but generally within 50 miles of it. Within the City Boundary there are only 123 dairy farms containing 1,513 cows, and these are situated for the most part in the outlying rural area. The farms which are outside the City Boundary are so constantly changing that no attempt has been made to keep a record of them, particularly as no power exists for Birmingham Officers to visit them with a view to seeing that they are kept in a reasonably sanitary condition. Our only means of checking the quality of nine-tenths of the milk supply is by sampling the milk as it arrives in the City.

The Public Health Department employ the following methods for keeping a watch on the quality of the milk consumed in the City :—

1. By taking samples for chemical analysis.
2. By taking samples for bacteriological examination.
3. By regular examination of all the cows in Birmingham to see that the cows are healthy and the dairies kept in a sanitary condition.
4. By regular inspection of milk shops to make sure that the milk vessels are clean, and that the conditions under which milk is stored and sold are reasonable.

Chemical Sampling.

As many as 2,601 samples of milk were taken during the year 1925. For this and other work under the Sale of Food and Drugs Act, two experienced Inspectors are employed, together with a clerk assistant. The samples are sent to the City Analyst, who reports the results to the Public Health Department for action when necessary. (See City Analyst's report for results of analysis).

Bacteriological Samples.

Four hundred and sixty-nine samples of raw milk, and 349 of pasteurised milk were taken by an Inspector appointed for the purpose. The average number of bacteria per cubic centimetre of milk was as follows :—

Birmingham Pasteurizers.

		Raw Milk.		Pasteurized Milk.	
No.	Kind of Pasteurizer.	No. of samples.	Average bacteria.	No. of samples.	Average bacteria.
1.	Flash Point ...	12	3,430,633	1	2,750
2.	Flash Point ...	37	45,462	18	38,313
3.	Retarder	2	27,550	9	438
4.	Retarder	18	243,572	40	5,743
5.	Retarder	42	71,897	12	13,072
6.	Retarder	12	116,541	22	8,958
7.	Flash Point ...	27	200,967	10	6,330
8.	Flash Point ...	29	94,757	18	1,242
9.	Retarder	23	129,903	17	5,907
10.	Retarder	27	108,563	27	45,980
11.	Retarder	31	117,572	18	143,642
12.	Retarder	37	219,054	16	42,506
13.	Retarder	35	181,916	26	46,641
14.	Flash Point ...	2	675	5	38,666
15.	Retarder	31	26,462	9	16,765
16.	Flash Point ...	28	119,128	29	661
17.	Retarder	32	160,658	23	13,829
18.	Retarder	29	202,825	20	64,836
19.	Retarder	15	294,993	29	8,113

The results of these examinations are sent to the milk dealers with an intimation that the information is supplied for their information only and must not be used for advertisement.

EXAMINATION OF BIRMINGHAM COWS.

The Veterinary Superintendent employs two of his Veterinary Inspectors to visit the cowsheds and examine each cow, with a view to ascertaining the existence of any ailment which would prejudicially affect the milk. In this way he is able to eliminate cows with inflammation of the udder, tuberculosis, and other diseases which damage the milk as human food. His report is as follows :—

INSPECTION OF COWS AND COWSHEDS IN THE CITY.

(REPORT BY MR. BRENNAN DEVINE, F.R.C.V.S., VETERINARY SUPERINTENDENT).

The regular inspection of cows and cowsheds in the City has been continued on the lines of the previous year, the City being divided into two districts, north and south, and a Veterinary Inspector being placed in charge of each district.

Owing to the continued prevalence of Foot and Mouth Disease throughout the country and to the spread of the disease to Birmingham on 19th February, which was followed by six other outbreaks in the City during the same month, veterinary inspection of dairies was temporarily discontinued within a radius of two miles of each outbreak in order to remove any risk of spreading the disease to other City dairies. Birmingham remained a scheduled infected area up to 24th March.

The following table shows the number of registered sheds, the number of visits paid by the Veterinary Inspectors to City Dairies, and the number of Cows in the City Dairies at 31st December, 1925, as compared with the previous year :—

	Dairy farms.	Cowsheds.	Dairy Cows.	Visits to sheds.
December 31st, 1925	123	252	1,513	2,901
December 31st, 1924	135	271	1,740	2,003

COWS.

The health, condition and cleanliness of the cows in the City Dairies has been good, and in only two cases was it found necessary to write to cowkeepers asking them to remove the manure from close proximity to the cowshed, and in only 18 cases cowkeepers were served with written notices to limewash their sheds.

Mastitis. Twenty-one cows were found in City dairies to be affected with acute catarrhal mastitis. In each case the owners were notified that the milk from these cows should not be sold for human consumption, and in the majority of cases, where possible, the animals were kept isolated from the rest of the herd.

COWSHEDS.

New Cowkeepers. Six applications were received from dairymen to commence keeping cows in the City for the sale of milk. In each case, as the sheds had been registered previously and were in a good state of repair, the applicant's name was placed on the register.

Dairies Discontinued.—Eighteen dairymen have discontinued keeping cows, and their names have been removed from the register.

Changes of Occupancy.—In 5 cases farms have changed hands, and the register has been rectified accordingly.

Cowsheds.—Of the 252 sheds on the register, 250 have been given registration numbers, and the other two are being altered to meet our requirements, prior to registration.

During the year one new shed has been built, one old shed has been re-built and enlarged, and 4 other buildings have been converted into cowsheds.

Two sheds have been repaired according to our instructions.

NEW ACT OF PARLIAMENT.

During the year 1925 the Milk and Dairies Consolidation Act came into operation. This Act while it will help generally the milk question in this country has certain features which will render the work in Birmingham more difficult, both as regards protecting ourselves against Tuberculosis in the milk supply, and as regards the prosecution of a crafty vendor of adulterated milk. The County Authorities already are showing signs that they do not like to have to pay for the elimination of a cow giving tubercular milk, which milk is sent to Birmingham.

TUBERCULOSIS AND THE MILK SUPPLY.

(REPORT BY MR. BRENNAN DEVINE, F.R.C.V.S., Veterinary Superintendent).

The precautions to reduce the amount of tubercle infection in the milk sold in the City have been continued on similar lines as in previous years, namely :—

(a) The detection of infection in the milk supply both from city dairies and outside sources.

(b) The eradication of tuberculosis from dairy herds supplying milk to Birmingham, (*a*) *The detection of infection in the milk supply both from city dairies and outside sources.*

During the year 681 samples of milk have been taken from city and outside dairies, railway stations, milk depots and from floats and other vehicles bringing milk into the city by road.

When a mixed sample of milk collected from a churn is found to be infected, we visit the farm from which the milk comes, examine all the cows on the premises and take further individual and mixed farm samples of milk with a view to tracing the offending animals.

Of the total of 681 milk samples taken, 52 were returned as infected, 6 of these being from city dairies and 46 from outside dairy farms. From the 6 infected mixed samples from the city dairies we were able to trace 4 tuberculous cows which were subsequently slaughtered at the Public Abattoir, and tuberculosis of the mammary gland was confirmed on post mortem in each case: 3 of them were dealt with prior to the introduction of the Tuberculosis Order 1st September, and one cow was dealt with under the new Order. In the other two cases the cows responsible for the infection in the milk had been disposed of before we received the result of the examination of the milk samples and prior to our visit to the farms.

Of the 46 samples from outside dairies, the farms were all visited and the milking cows examined, and individual samples of milk taken, and as a result we were able to trace 32 offending cows, which have all been disposed of for slaughter. In 9 cases the reports of the examination were not to hand at 31st December, and in 7 cases cows had been sold out or disposed of for slaughter subsequent to our taking the mixed samples and prior to our visit to the farms.

Compensation.—Until the introduction of the Tuberculosis Order 1925 on the 1st September, the compensation payable under Public Health Committee Resolution No. 8283 was continued, and from the 1st January to 31st August compensation amounting to £44 10s. 0d. was paid in respect of 9 tuberculous cows found on outside dairies supplying milk to Birmingham.

With respect to the 4 tuberculous cows found in city dairies, £2 compensation was paid in two cases under Resolution No. 8283; one case was dealt with under the Tuberculosis Order, £16 10s. 0d., compensation being paid to the owner; and the fourth cow was disposed of by the owner for slaughter.

TUBERCULOSIS ORDER, 1925.

This Order came into force 1st September, 1925, and provides for the notification of disease in cattle which are affected with tuberculosis of the udder or tuberculous emaciation, the slaughter of the infected animals and compensation to the owner.

Previous to the introduction of the Tuberculosis Order, we experienced great difficulty in inducing farmers, particularly those at outside dairies, from which infected milk was sent to Birmingham, to dispose of cows affected with tuberculosis of the udder. Since the Order was introduced we have, in each case, reported the cows traced to the County Council and the animals have been dealt with under the Order by the Local Authority concerned. This has facilitated our work a good deal and saved us many journeys to the country.

Under this Order Birmingham will no longer have to pay compensation for tuberculous cows which are detected at outside dairies supplying milk to Birmingham.

With respect to any cases of tuberculous cows found in city dairies, for which we pay compensation under the Order when they are slaughtered, three-fourths of this compensation is recoverable from the Ministry of Agriculture. Since the 1st September eight suspected cases of tuberculosis in city dairies were reported to us. We examined each cow and in four cases found them to be affected. Compensation amounting to £23 5s. 0d. was paid to the owners.

In connection with the tuberculous cows found in outside dairies, the Public Health Committee on 27th October, 1925 passed the following Resolution:

> 5078. RESOLVED: That the Veterinary Superintendent be requested to communicate with outside Authorities with a view to ascertaining information as to the ultimate disposal of any particular animal which is reported by him as being infected.

Since the introduction of the new Tuberculosis Order, the following tuberculous cows have been traced by us in outside dairies and have been dealt with by the Local Authorities concerned, namely:—

Traced from Milk Sample No.	Description of Animal.	Location of Outside Dairy.	County.
3180	Red and white cow	Milton Lodge, Penkridge	Staffs.
3184	Red cow	Warren Farm, Coughton	Warwick.
3221	Black cow	Lapworth	Worcs.
3225	Black Welsh cow	Long Lane, Peplow	Staffs.
3238	Freisian cow	Three Bridges Farm, Wellesbourne	Warwick.
3269	Red roan cow	Castle Farm, Stafford	Staffs.
3355	Red cow	Kingston Farm, Claverdon	Warwick.
3361	Red and white cow	Elmdon House Farm, Elmdon	Warwick.
	Red and white cow		
3381	Red cow	Castle Farm, Maxstoke	Warwick.
3433	Red cow	Pipehall, Lichfield	Stafford
3461	Red cow	"Findwood," Rowington	Warwick,

The Local Authority concerned has reported that on post mortem examination, tuberculosis of the udder was confirmed in each case.

(*b*) *The eradication of tuberculosis from dairy herds supplying milk to Birmingham.*

At the beginning of the year there were 24 herds continuing under the above scheme. During the year we had two applications for herds to be tested with a view to their inclusion in the scheme. Of the herds which have been tested for some time, the owners of herds Nos. 4 and 18 withdrew from the scheme, having discontinued supplying milk to Birmingham. Two of the herds tested for the first time in 1924 were not again tested, the owners having decided not to continue in the scheme. At the end of the year there were 22 herds continuing under the scheme; of which 5 are tested for Grade A (Tuberculin Tested) Milk.

The following is a list of herds dealt with under the scheme:—

No.	Approx. No. of Cows	Herds free	Herds being freed	Grade A milk	Breeding Herds	Non-Breeding Herds	Mixed Herds	City Dairies	Outside Dairies
1	93	1	—	1	1	—	—	1	—
2	12	1	—	—	—	1	—	1	—
3	51	1	—	—	—	—	1	—	1
4	43	Discontinued.							
5	55	1	—	—	—	—	1	—	1
6	18	1	—	—	1	—	—	1	—
7	25	1	—	—	1	—	—	—	1
8	26	1	—	—	—	—	1	—	1
9	9	1	—	—	1	—	—	1	—
10	38	1	—	—	1	—	—	—	1
11	13	1	—	—	1	—	—	—	1
12	18	1	—	—	1	—	—	—	1
13	5	1	—	—	1	—	—	—	1
14	16	1	—	—	—	—	1	1	—
15	16	1	—	—	1	—	—	—	1
16	15	1	—	—	1	—	—	—	1
17	69	1	—	—	1	—	—	1	—
18	22	Discontinued.							
19	30	1	—	—	1	—	—	—	1
20	47	1	—	1	1	—	—	—	1
21	15	1	—	1	1	—	—	—	1
22	41	1	—	1	1	—	—	—	1

HERDS TESTED FOR THE FIRST TIME.

No.	Approx. No. of Cows	Herds free	Herds being freed	Grade A milk	Breeding Herds	Non-Breeding Herds	Mixed Herds	City Dairies	Outside Dairies
23	26	1	—	1	—	1	—	—	1
24	15	1	—	—	1	—	—	—	1

COW TESTING.

The testing of the herds which come under the scheme has been carried out half-yearly and resulted as follows:—

No.	Tested.	Passed.	Failed.	Doubtful.
1	225	224	—	1
2	10	10	—	—
3	123	121	2	—
4	96	90	6	—
5	101	94	7	—
6	38	34	4	—
7	49	49	—	—
8	39	35	2	2
9	24	23	1	—
10	62	62	—	—
11	28	28	—	—
12	42	41	—	1
13	9	9	—	—
14	30	30	—	—
15	35	35	—	—
16	31	28	2	1
17	143	138	5	—
18	22	15	5	2
19	58	54	4	—
20	114	112	1	1
21	27	27	—	—
22	83	73	9	1

HERDS TESTED FOR THE FIRST TIME.

No.	Tested.	Passed.	Failed.	Doubtful.
23	26	21	2	3
24	15	15	—	—
	1430	1368	50	12

Among the animals submitted to the test, those tested for the first time numbered 233; of these, 16 or 6.9 per cent. failed to pass the test.

Cost Incurred by Testing Herds.

The testing of the herds has continued to be carried out chiefly by the Corporation Veterinary Staff, and partly by Local Veterinary Surgeons on behalf of the Corporation. The cost of this work during the year was £59 19s. 10d., of which £41 7s. 3d. was for tuberculin and £18 12s. 7d. for local veterinary fees and expenses. In 1924 the cost was £83 6s. 3d. and in 1923 £91 9s. 8d.

Summary.

Dairy farms in the City	123
Milking Cows in the City	1,513
Visits to Sheds during 1925	2,901
Cows in City Dairies with affected udders	4
Visits to outside farms during 1925	94
Samples of Milk taken	848
Infected samples	98
Herds Tested (including Grade "A")	24
Cows tested	1,430
Cows which passed the test	1,368
Cows which failed to pass the test	62

HANDLING OF MILK IN THE CITY.

We get milk sent into the City once a day from farmers, most of which will not keep because it is dirty; therefore, the dairymen either sterilize it or pasteurize it. This procedure in addition to killing the germs which sour the milk, also kills the germs which produce scarlet fever, diphtheria or enteric fever, if they should at any time get into the milk.

Sterilizing the Milk.

This process has been carried on in Birmingham for about 25 years. Sterilized milk is popular amongst the working classes who appear not to mind the scalded taste of the milk. The process consists of first warming the milk and then passing it through a "homogeniser" which breaks up the fat globules into minute particles, so small that no cream will rise on homogenised milk. The homogenised milk is then put into clean narrow necked bottles (which have been sterilized). These are capped and are then immersed in cold water in large vats. The water is brought to the boil by injection of steam and when the milk in the bottles has reached the temperature of 212 degrees it is kept at this temperature for half an hour. The steam is then turned off and the bottles are cooled gradually, first in water and then in the air.

The milk is not sterile, but the number of organisms 5—7 per c.c. is so small that souring is prevented for several days.

The milk is easily handled by the dairyman, and it is specially convenient in the homes of the poor where it is found not necessary to transfer it to a milk jug. It keeps well in the home.

It is probable that the long heating at a temperature of boiling water damages the constitution of the milk somewhat, but as yet there is no very obvious sign of this in the children who are fed on it. The amount of milk which is sterilized in Birmingham is large—perhaps amounting to one half of the supply.

Pasteurised Supply.

Two methods are in operation in Birmingham.

(1) Flash point pasteurisation, in which the milk is heated momentarily to a high temperature. This is a bad and inefficient method done solely with a view to enabling the dairymen to sell the milk with less risk of souring.

(2) The official method, as laid down in the regulations of the Ministry of Health. In this process the milk is never heated to a higher temperature than 145°F., and is kept between 140° and 145° for half-an-hour. It is afterwards cooled to 40°F. and bottled. This kills disease producing germs and many of the souring germs. It does not alter the taste of the milk like sterilization, and it does not interfere with the rising of the cream. The process of pasteurization and bottling is increasing in Birmingham.

REGISTRATION AND INSPECTION OF MILK SHOPS.

Two Inspectors are wholly employed in visiting the milk shops, the railway stations and depots, to see that reasonable conditions exist for the handling of milk. They also look after the numerous alterations in registration. Their work is indicated by the statement below:—

No. of Milkshops on Register	4,277
No. of Dairies on Register	7
No. of Purveyors on Register	714
New milkshops registered	196
New purveyors registered	85
Milkshop transfers	340
No. of visits to Milkshops	5,503
No. of visits to Dairies	30
No. of visits to Purveyors	691
No. of visits to Railway Stations	67
Milk vessels examined at Milkshops	7,856
Milk churns examined at stations	472
Milkshops and Stores limewashed	41
Sanitary defects found	21
Other contraventions	16
Cases of infectious disease reported	60
Milkshops registrations cancelled	453
Purveyors' registrations cancelled	54

The reduction in the number of registered milk shops is due to the fact that the Act of 1925 does away with the necessity for registration of those shops where only bottled milk is sold.

Filling dirty bottles on the milk round and selling this as bottled milk at a higher price than loose milk has been reported in other cities, but no case has as yet come to light in Birmingham.

AMOUNT OF MILK CONSUMED.

Early in 1925 a census of milk consumption was made when it was found that excluding milk used in factories and milk sold as condensed milk 9¼ oz. were used per head per day. This is less than half what might be used with great advantage, and indicates that a large number of the young do not get sufficient of what is perhaps our most valuable food.

MILK SPECIAL DESIGNATION ORDERS.

The following licences were granted during 1925:—

(1) Producer's licence to sell Certified Milk granted by Ministry of Health to Messrs. A. J. Follows and Son	1
(2) Dealer's licence to sell Grade " A " Tuberculin Tested Milk — Messrs. The Midland Counties Dairy Co.	1
(3) Licence to sell Grade " A " Milk	—
(4) Licence to sell Pasteurised Milk	
(a) *Pasteuriser's licence.* Messrs. Wathes, Cattell and Gurden, Ltd. Messrs. The Birmingham Co-operative Society, Ltd. Messrs. A. J. Follows and Son. Messrs. The Midland Dairy Farmers, Ltd. Mr. E. Denzil Ede. Messrs. Fowler Bros. Mr. F. V. Billingsley. Messrs. R. Martin and Co., Ltd.	8
(b) *Dealer's Licence*	21
(c) *Supplementary Licence.* Messrs. Bray and Bailey, Smethwick	1

INSPECTION OF MEAT AND OTHER FOODS.

The following report is made by the Veterinary Superintendent on his work during 1925.

STAFF OF THE VETERINARY DEPARTMENT.

Superintendent—W. B. Devine, F.R.C.V.S., D.V.S.M., M.R.S.I.

Asst. Vet. Surgeon—W. White, M.R.C.V.S.

Veterinary Inspectors—F. E. Somer, F.R.C.V.S., D.V.S.M.
C. G. Allen, M.R.C.V.S., D.V.S.M.
H. B. Allan, M.R.C.V.S., D.V.S.M.

Inspectors of Foods—G. E. Andrews, W. H. Allen, A. Cottam, J. L. Griffith, J. H. Marpell, J. T. Millington.

With a view to obtaining uniformity and regular inspection of meat and other foods the inspection work has been continued on the lines of the previous year. The City is divided into four districts, a Food Inspector being placed in charge of each district. The inspection work in the Public Abattoirs, and the Wholesale Fish and Vegetable Market is carried out by Inspectors who are constantly employed there.

Slaughterhouses.

All private slaughterhouses in the City are regularly visited, and during the year 5,817 visits of inspection were made.

During the year 11 private slaughterhouses have been closed. In the majority of cases this was due to the premises being taken over for other purposes.

Changes of Occupancy.

Three applications for change of occupancy of private slaughterhouses were received by the Markets and Fairs Committee. In each case the premises were inspected, and as they were found in a sanitary condition the applications were granted.

Register.

At the 31st December, 1925, there were 108 private slaughterhouses and two knackeries in use:—

Registered Slaughterhouses	54
Annually licenced slaughterhouses	54
Knackeries	2
	110

Registered Food Preparation Premises.

The following is a list of Food Preparation premises on the register at the 31st December, 1925.

	No. in City.
A-la-mode Beef	89
Sausage Manufacturers	33
Pork Pie Manufacturers	41
Tripe Dressers	78
Potted and Cooked Meat Manufacturers	108
Ham Manufacturers	6
Jam Manufacturers	1
	356

Visits of Inspection.

During the year 70,851 visits of inspection were paid by the Inspectors as compared with 67,204 visits in 1924, namely:—

	Visits of Inspection. 1925.	Visits of Inspection. 1924.
Slaughterhouses	5,817	6,512
Beef Butchers	17,125	17,243
Pork Butchers	5,847	5,672
Fishmongers	6,710	6,952
Fruiterers	8,092	8,035
Provision Dealers	649	42
Ham and Bacon Dressers	795	686
Street Hawkers	17,357	15,764
Inspections by Request	1,166	1,220
Wholesale Provision Merchants	6	11
Cold Stores	2,116	121
A-la-Mode Beef Dealers	2,188	2,061
Tripe Dealers	171	106
Caterers	188	183
Fish Friers	2,457	2,589
Jam, etc., Manufacturers	4	7
Horse Flesh Shops	5	—
Sausage and Pork Pie Manufacturers ...	158	—
	70,851	67,204

The above work does not include the inspection work at the City Meat Market, visits to stalls in the Market Hall, Fish Market, Vegetable Market, or Bell Street, there being Inspectors constantly employed in these Markets.

SLAUGHTERING OF ANIMALS FOR FOOD.

Return of Animals slaughtered in Public Slaughterhouses.

	Beasts.	Calves.	Sheep and Lambs.	Goats.	Pigs.	Total.
1925	43,495	53,697	197,285	—	46,967	341,444
1924	40,160	45,929	162,870	—	64,451	313,410

Return of Animals slaughtered at Montague Street.

Pigs	5,564
Beasts	5
Goats	1

FOREIGN ANIMALS.

The following is a return of foreign animals received in Birmingham during the year:—

	Beasts.	Sheep and Lambs.	Pigs.	Total.
Irish	765	715	4,352	5,832
Canadian	3,329	150	—	3,479
	4,094	865	4,352	9,311

UNSOUND MEAT, ETC.

Return of Diseased Organs Destroyed as Unfit for Human Food.

	Bulls.	Cows.	Calves.	Swine.	Sheep.	Goats.	Total
Lungs—							
Tuberculosis	631	1,890	50	3,318	—	—	5,889
Other Conditions	337	1,015	455	986	2,019	6	4,818
Hearts—							
Tuberculosis	381	1,147	50	3,317	—	—	4,895
Other Conditions	158	475	455	991	1,923	6	4,008
Bowels—							
Tuberculosis	489	1,472	33	3,259	—	—	5,253
Other Conditions	227	682	285	949	408	6	2,557
Stomachs—							
Tuberculosis	490	1,473	33	3,246	—	—	5,242
Other Conditions	228	685	285	641	408	6	2,253
Spleens—							
Tuberculosis	486	1,454	50	3,317	—	—	5,307
Other Conditions	210	626	455	983	1,907	6	4,187
Livers—							
Tuberculosis	495	1,488	50	3,318	—	—	5,351
Other Conditions	2,063	6,186	492	1,339	6,155	6	16,241
Kidneys—							
Tuberculosis	308	926	50	359	—	—	1,643
Other Conditions	170	526	550	323	801	12	2,382
Udders—							
Tuberculosis	—	602	—	439	—	—	1,041
Other Conditions	—	475	—	383	—	—	858

	Bulls.	Cows.	Calves.	Swine.	Sheep.	Goats.	Total
Heads—							
Tuberculosis	338	1,019	40	2,955	—	—	4,352
Other Conditions	199	600	376	185	1,256	6	2,622
Fore Quarters—							
Tuberculosis	15	51	4	6	—	—	76
Other Conditions	3	20	7	3	13	—	46
Hind Quarters—							
Tuberculosis	10	40	—	—	—	—	50
Other Conditions	6	23	4	1	4	—	38
Carcases—							
Tuberculosis	81	278	28	198	—	—	585
Other Conditions	110	238	370	280	906	10	1,914

MISCELLANEOUS.

The quantity of miscellaneous meat surrendered was approximately 15 tons 19 cwts., of which the greater part was destroyed for putrefaction.

WEIGHT OF MEAT SURRENDERED.

The total weight of meat surrendered during the year was 539 tons as compared with 605 tons during 1924.

The weight of meat surrendered included 454 carcases of calves for immaturity.
The number of cases of surrender is 10,677.

FROZEN MEAT.

During the year there were 2 tons 6 cwts of frozen and chilled meat surrendered for putrefaction.

FISH DESTROYED.

	T.	C.	Q.	LBS.
Bloaters	—	14	2	6
Bream	2	6	—	—
Catfish	—	1	—	—
Coal Fish and Pollock	1	7	—	—
Cod, Codling or Sprag	14	3	1	14
Eels, Ling and Congers	—	11	—	8
Fillets	2	—	1	17
Gurnard and Mullet	—	2	—	—
Haddock (dry)	2	6	2	24
Haddock (fresh)	1	14	—	14
Hake	26	8	2	2
Halibut	—	9	1	5
Herrings	4	6	2	—
Kippers	2	—	1	14
Mackerel	3	4	2	—
Megrims	18	4	3	22
Mixed Fish	1	10	—	—
Plaice	19	3	3	23
Roe	10	8	2	1
Sprats	—	8	1	6
Salmon	—	2	3	3
Turbot and Soles	—	10	—	14
Whelks	2	15	—	—
Witches	1	10	—	—
Whiting	1	15	—	—
	118	4	—	5

No. of surrenders, 837.

SHELL FISH.

	T.	C.	Q.	LBS.
Crabs	—	8	3	1
Lobsters and Crayfish	—	1	3	21
Mussels	6	11	—	—
Periwinkles	—	9	—	—
Prawns and Shrimps	3	11	3	1
Oysters and Cockles	1	8	—	—
	12	10	1	23

No. of surrenders, 95.

POULTRY, ETC.

	T.	C.	Q.	LBS.
Ducks	—	10	3	5
Eggs	3	9	2	14
Fowl and Pigeons	3	7	—	14
Game	—	11	—	20
Geese and Turkeys	5	16	1	9
Rabbits	19	15	2	15
	33	10	2	21

No. of surrenders, 1,263.

FRUIT AND VEGETABLES.

	T.	C.	Q.	LBS.
Beetroot and Spinach	—	7	—	8
Carrots	3	6	2	2
Celery and Rhubarb	—	19	2	—
Currants and Strawberries ...	4	2	2	11
Cauliflower	1	17	—	8
Cucumbers and Mushrooms ...	—	1	1	20
Cabbage	13	9	3	7
Grapes and Cherries	1	2	2	19
Gooseberries and Plums	1	0	1	13
Nuts	—	6	2	20
Oranges and Lemons	—	2	2	2
Peaches and Apricots	—	6	1	27
Peas and Beans	20	2	3	2
Parsnips	3	—	3	—
Pears and Apples	6	5	2	20
Potatoes	10	13	—	7
Onions	1	2	—	—
Tomatoes	3	18	1	14
Watercress and Parsley	—	8	1	—
Vegetable Marrows	—	8	—	—
	73	1	2	12

No. of surrenders, 179.

MISCELLANEOUS FOODS DESTROYED.

T.	C.	Q.	LBS.
3	9	—	26

No. of surrenders, 119.

SHELL FISH.

The following is a summary shewing the samples taken and submitted for bacteriological examination of shell fish offered for sale on our market.

		Origin.		
Number of Samples.		English.	Irish.	Other Sources.
11	Oysters	3	—	8
41	Mussels	14	15	12
1	Cockles	—	—	1
22	Periwinkles	—	14	8

Shell fish from 29 sources have been barred from our markets owing to the high percentage of contamination found in them.

DYED ORANGES.

During the year a large number of consignments of oranges of pale colour were disposed of on our wholesale markets. As these oranges were sold at a low price, the purchasers were principally hawkers who in most cases had them treated with dyes, etc., with a view to improving their appearance. After treatment these oranges were disposed of on barrows by hawkers in the streets as " Blood Oranges, Moroccan Bloods," etc. The dyes used were chiefly permanganate of potash, Bismarck Brown and Chrysoidine. The oranges in many cases were soaked in boiling water and afterwards shaken up in grease saturated with dye; this was done with a view to giving them a smooth coat and an improved colour.

Sugar Sweepings.

During the year notification was received of 626 bags (18 lots) of sugar sweepings being sent to Birmingham. On arrival these were subjected to a satisfactory process of refining, and before being allowed to be sold for human consumption were inspected and passed by us.

Covering of Meat.

On the 23rd January, the work under the City Bye-law relating to the covering of meat while being carried through the streets on wagons and other vehicles was delegated to the Markets and Fairs Committee. Notices relating to this were sent out and posted up in connection with the Markets.

We received reports in respect of 44 traders conveying meat on lorries and wagons through the streets which was uncovered or partially covered and letters of caution were sent in each case. Following this during the year there were 2 prosecutions, and fines amounting to £1 were imposed in each case.

Public Health (Meat) Regulations, 1924.

These regulations came into force on 1st April, 1925, and among other things they provide for:—

1. Notice to be given in case of slaughter and any case where the owner finds a carcase diseased in any way, he is to notify the Local Authority.

2. No person suffering from any infectious disease shall take part in the slaughtering of animals or the handling of meat intended for human consumption.

3. No gut scraping, tripe cleaning, preparation of articles of food, household washing, or work of any kind other than is involved in the slaughter or dressing of carcases shall be carried on in any slaughterhouse.

4. For the marking of meat by a Local Authority provided the system is submitted to, and approved by the Minister of Health.

5. All shops, stores, etc., must be properly protected to prevent mud, filth and other contamination being splashed or blown on to the meat, and no meat must be exposed for sale by hanging same outside unless properly covered.

6. Under the section of the Regulations relating to transport and handling, the Order provides that the meat shall be covered while being conveyed in any vehicle, and shall not be carried in the same vehicle as live animals.

Leaflets containing these provisions were handed to all the meat traders in the City.

These Public Health (Meat) Regulations, 1924, are based on the recommendations of the Departmental Committee on Meat Inspection, and are issued by the Ministry of Health to secure more adequate inspection of animals slaughtered in this country, and improvements in the handling transport and distribution of meat.

The regulations deal with meat alone, and do not cover other foods such as game, poultry, fish, etc.

In connection with the Regulations, the Markets and Fairs Committee had an interview with Deputations from the Birmingham Branch of the Meat Traders Federation and the Birmingham and Midland Counties Grocers Protection and Benevolent Association. Following this interview, as many of the traders were not complying with the Regulations, letters of caution were sent in 34 cases to various butchers in the City.

During the year 50 summonses were issued in respect of butchers exposing meat to contamination by hanging it outside their shops and also by exposing meat for sale on window boards protruding beyond the shop window.

Generally speaking these Meat Regulations have been carried out very well throughout the City, and notice of slaughter has been sent in by all people in the trade who are occupiers of private slaughterhouses.

The result of the Meat Regulations has undoubtedly been of great assistance to us in getting the occupiers to carry out improvements in their slaughterhouses and in their shops. The majority of the traders in the City keep the meat in their shops behind glass windows, and as regards the carrying of meat through the streets, this is now, in all cases, being carried on clean vehicles and properly covered.

In order to influence the butchers to comply with the Regulations, the Markets and Fairs Committee issued a further circular in which they pointed out that Article 20 (5) of the Regulations cannot be complied with unless the following precautions are observed, viz.:—

1. All meat exposed outside a shop must be effectively protected from contamination by a covering of suitable stout material.

2. All meat inside a shop in such a position as to render it liable to contamination must be protected either by a closed window or a covering of suitable stout material.

Prosecutions.

The following is a summary of prosecutions for offences under the Public Health (Meat) Regulations, Public Health Acts, and offences against the Diseases of Animals Acts and Orders:—

	Number of cases.	Total of fines.
Diseased Meat	2	£40
Fish, fruit, etc.	—	—
Public Health (Meat) Regulations	50	£53
Slaughtering on unlicensed premises	3	£2 10s.
Offences against Diseases of Animals Acts and Orders:		
Foot and Mouth Disease	2	£1 10s.
Parasitic Mange	1	£1

SALE OF FOOD AND DRUGS ACTS. MILK AND CREAM REGULATIONS.

Full particulars of the work done in regard to these are given in the Report of the City Analyst which is published separately.

VI. PREVALENCE OF, AND CONTROL OVER, INFECTIOUS DISEASES.

INFECTIOUS DISEASES GENERALLY.

The deaths during 1925 from some of the chief infectious diseases were as follows :—

Disease.	Deaths in 1925.	Average 1915-24.	Above or below the average
Enteric Fever	4	5	— 1
Smallpox	0	0	—
Measles	109	176	— 67
Scarlet Fever	22	40	— 18
Whooping Cough	222	183	+ 39
Diphtheria	95	130	— 35
Diarrhœa and Enteritis	276	371	— 95
Pulmonary Tuberculosis	930	1,003	— 73
Other Forms of Tuberculosis	153	179	— 26
Influenza	370	526	—156

The prevalence of the notifiable diseases is shown in the next table :—

Disease.	Cases in 1925	Average 1915-24.	Above or below the average
Enteric Fever	31	26	+ 5
Smallpox	1	0	+ 1
Scarlet Fever	1,852	2,674	— 822
Diphtheria	1,896	1,276	+ 620
Erysipelas	379	436	— 57
Puerperal Fever	146	132	+ 14
Ophthalmia Neonatorum	335	361	— 26
Pulmonary Tuberculosis	1,491	2,491	—1000
Other Forms of Tuberculosis	306	383	— 77
Acute Primary or Influenzal Pneumonia ...	2,185	Only recently notifiable.	
Cerebro-Spinal Fever	7	21	— 14
Acute Poliomyelitis	11	15	— 4
Polio Encephalitis	1	Only recently notifiable.	
Encephalitis Lethargica	92	,,	,,
Malaria	6	,,	,,
Dysentery	3	,,	,,
Trench Fever	0	,,	,,

The elementary school teachers reported the following cases, to which visits were paid by Health Visitors (see page 23) :—

Measles	11,636
German Measles	2,722
Whooping Cough	6,138
Chicken Pox	5,752
Mumps	6,403

ENTERIC FEVER.

During 1925, 31 cases of Enteric Fever were reported, with 4 deaths.

During the previous 10 years the average number of new cases reported was 26. Before the pail system of excrement removal was abolished there used to be many hundreds of cases every year.

Of the 31 cases notified during 1925, seven were among nurses who were employed in nursing carrier cases suffering from diseases other than enteric. One case was a patient in a lunatic asylum, another patient had a history of eating oysters which disagreed with him at the time, five were almost certainly imported cases, and three were secondary cases in houses where a previous case had existed. Fourteen were single cases in dwelling houses where no satisfactory source of infection could be traced.

Seventeen cases were notified as B. Typhosus, one case as B. Typhosus associated with B. Paratyphosus B., one was due to Paratyphosus A., four to Paratyphosus B., one to Paratyphosus C., and one case had negative blood re-actions and gave B. Typhosus in the stools.

SMALLPOX.

During 1925 there were 5,355 cases of Smallpox notified in England and Wales. Many of these cases were in districts not far removed from Birmingham. It is, therefore, somewhat remarkable that the disease did not spread more often to Birmingham. One case only was reported—a case of modified Smallpox in an adult male who made a good recovery. The source of his infection could not be traced.

The Smallpox Hospital, which has remained in an excellent isolated position for a great many years, has during the year 1925 had this isolation spoiled by the erection of over 1,000 new houses on an estate purchased by the Corporation on the opposite side of the road. It formerly had no house within one-quarter of a mile. It now has about 1,400 houses within this distance.

VACCINATION.

The following are the vaccination statistics for the year ending December 31st, 1924.

Births returned	18,588			
Conscientious objections	2,716,	or	14.6	per cent. of total.
Died unvaccinated	1,132			
Successfully vaccinated	12,222,	or	70.0	per cent. of survivors.
Insusceptible	106,	or	0.6	,, ,,
Postponed by medical certificate	169,	or	1.0	,, ,,
Removed to other districts	489,	or	2.8	,, ,,
Lost sight of	416,	or	2.4	,, ,,
Still under notice	1,338,	or	7.7	,, ,,

During the year the Minister of Health appointed a Departmental Committee for the following purposes :—

(1). " On matters relating to the preparation, testing, and standardisation of vaccine lymph.

(2) " On the practicable methods which are available in the light of modern knowledge to diminish or remove any risks which may result from vaccination.

(3) " On the methods of vaccination which are most appropriate to give protection against risk of Smallpox infection in epidemic and non-epidemic periods.

(4) " And to co-ordinate the work of investigation on these questions in this country and abroad, having regard to the corresponding work undertaken by international health organisations."

MEASLES.

There were 109 deaths from Measles in 1925, as against an average of 250 per annum in the previous 20 years.

There was a great epidemic during the year, probably one of the most extensive that has ever occurred. No less than 11,636 cases were reported from the Birmingham schools. The death-rate was a comparatively low one, viz., .11 per 1,000 persons.

It was fortunate that the main part of the epidemic occurred during mild weather.

The cases and deaths are set out below :—

	CASES.		DEATHS.		Death-Rate (Measles only).
	Measles.	German Measles.	Measles.	German Measles.	
1906	?	?	275	?	.34
1907	?	?	409	?	.51
1908	?	?	70	?	.08
1909	?	?	676	?	.82
1910	?	?	42	?	.05
1911	?	?	395	?	.47
1912	7,693*	1,088*	571	3	.67
1913	3,661*	85*	398	1	.46
1914	4,612*	61*	310	—	.35
1915	8,144*	680*	420	—	.47
1916	10,635	4,996	101	1	.11
1917	15,516	472	333	4	.37
1918	5,413	300	71	1	.08
1919	15,158	565	189	—	.20
1920	7,144*	477*	147	2	.16
1921	4,618*	121*	153	1	.17
1922	4,147*	125*	79	0	.09
1923	7,787*	96*	186	1	.20
1924	5,969*	112*	79	0	.08
1925	11,636*	2,722*	109	1	.11

* Partial notification only through schools.

The mean death-rate from Measles in quinquennial periods over the past 25 years has been as follows :—

DEATH-RATE FROM MEASLES.	
1901-05	.36
1906-10	.36
1911-15	.48
1916-20	.18
1921-25	.13

The mortality curve for the disease is shown in the chart on the opposite page.

The poorer quarters suffered most, as is always the case, the death-rates in the groups of wards being as follows :—

	Death-Rate	Average Death-Rate.			
	1925.	1912-15.	1916-20.	1921-25.	* Decrease.
Central Wards	.29	.93	.40	.29	69%
Middle Ring of Wards	.07	.40	.18	.09	78%
Outer Ring of Wards	.04	.24	.06	.04	83%
Whole City	.11	.49	.18	.13	73%

* 1921-25 compared with 1912-15.

It will be noticed that Measles has almost disappeared as a cause of death in the middle and better-class wards.

The ages at which deaths occurred were as follows :—

	No. of deaths.	Percentage of total deaths.
Under 1 year	24	22
Between 1 and 2 years	56	52
,, 2 ,, 3 ,,	9	8
,, 3 ,, 4 ,,	8	7
,, 4 ,, 5 ,,	3	3
All ages over 5	9	8

Every known case of Measles is visited by a Health Visitor, and instructions are given as to precautions to be taken. In cases where no doctor is in attendance and where careful nursing is required, the case is referred to the District Nursing Society for the district, and the fee is paid by the Public Health Department.

It would appear to be very difficult to prevent the spread of Measles under the conditions existing in a large city. There can be no doubt, however, that the mortality can be greatly reduced by securing intelligent nursing for every case and thus preventing the complications which cause death.

By these means the mortality from Measles throughout England is year by year declining. It is now somewhat less than one half of what it formerly was.

There is a possibility that by the use of an injection of blood serum from a Measles convalescent into a child commencing with the disease the virulence of the disease can be very much reduced. Already two clinics have been opened in Paris for treatment by this means.

SCARLET FEVER.

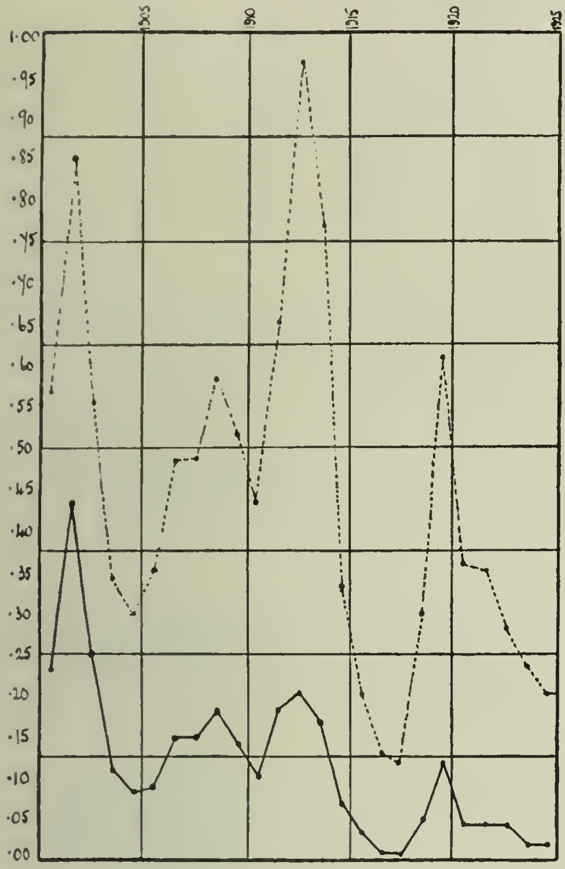
The incidence of Scarlet Fever during 1925 was low, 1,852 cases having been reported against an average of 2,674 cases in the previous ten years.

Twenty-two deaths were caused by the disease, which represents a fatality rate of 1.19 per cent. or a death-rate of 0.02 per 1,000 persons.

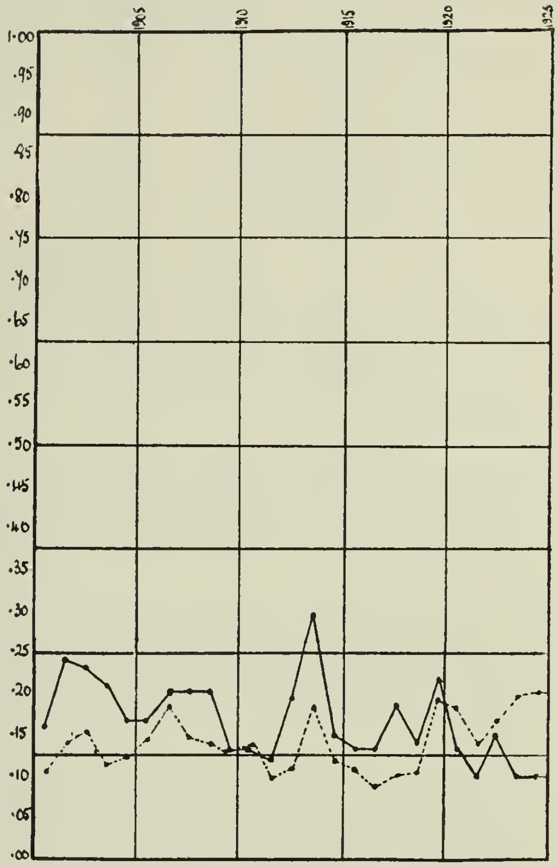
	Number of Cases.	Case-rate per 1,000.	Number of Deaths.	Death-rate per 1,000.	Case mortality per cent.
1901-05	4,038	5.21	172	.22	4.26
1906-10	3,956	4.83	116	.14	2.93
1911-15	5,456	6.29	125	.14	2.29
1916-20	2,472	2.73	41	.04	1.66
1921-25	2,652	2.84	32	.03	1.21
1916	1,796	2.01	26	.03	1.45
1917	1,143	1.27	12	.01	1.05
1918	1,035	1.19	11	.01	1.06
1919	2,821	3.05	45	.05	1.60
1920	5,563	6.13	110	.12	1.98
1921	3,320	3.62	40	.04	1.20
1922	3,250	3.51	36	.04	1.11
1923	2,619	2.81	39	.04	1.49
1924	2,219	2.31	23	.02	1.04
1925	1,852	1.95	22	.02	1.19

DEATH RATE PER 1000.

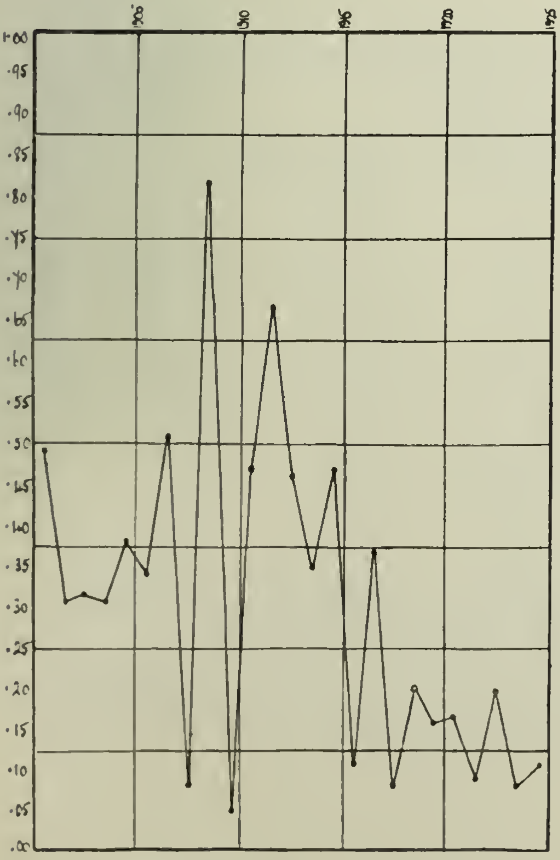
SCARLET FEVER



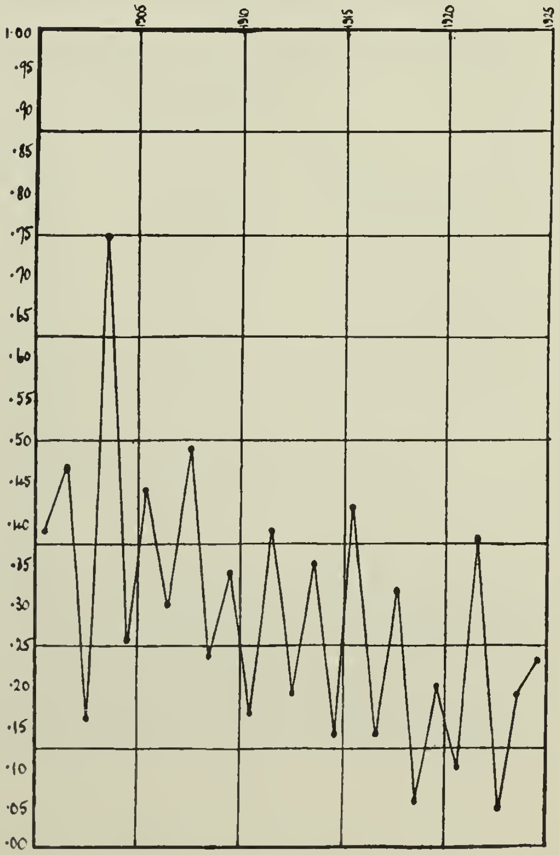
DIPHTHERIA



MEASLES



WHOOPING COUGH



DOTTED LINES ··· INDICATE CASE RATE PER 100 POPULATION [NOT 1,000].

Formerly Scarlet Fever was a very fatal disease. Its fatality rate has decreased year by year as well as its incidence rate, as shown in the chart opposite page 58.

The relative prevalence of Scarlet Fever in different parts of the City is shown in the figures below:—

Cases notified per 1,000 of the population.

			Average rate.		
	1925.	1912-15.	1916-20.	1921-25.	*Decrease.
Central Wards	2.06	6.12	3.26	2.91	52%
Middle Ring	2.01	7.23	2.85	2.65	63%
Outer Ring	1.55	6.77	2.47	2.75	59%
City	1.95	6.80	2.73	2.84	58%

* 1921-25 compared with 1912-15.

The fact is that Scarlet Fever has become less prevalent than formerly and very much less fatal. It is, however, still a disease which leaves certain very undesirable sequelæ.

Why Scarlet Fever should be less fatal is difficult to say. The general type of the disease is less virulent everywhere, except that at comparatively rare intervals cases of a virulent character still occur.

This reduced virulence is obviously not due to hospital isolation, for the same phenomenon is experienced in several large districts where no isolation in hospital is practised. Indeed, hospital isolation does not appear to influence the incidence of the disease in towns in any way, as it is not more prevalent in towns with no isolation than in towns with ample hospital accommodation.

For severe cases of Scarlet Fever there is a need for hospital isolation, because in such cases by modern serum therapy it is possible to greatly reduce the virulence. The method can as yet only be applied to a limited number of cases, for there are many improvements yet to be made in the methods of application before they can be generally employed.

Return Cases.

Of the 1,852 cases of Scarlet Fever which occurred during the year, 80, or 4.3 per cent. were cases which developed in the homes within a month of discharge from hospital or release from home isolation of 58 original patients. Of these infecting patients 55 discharged from hospital were followed by 77 return cases, and 3 after release from home isolation were followed by 3 return cases.

Details of return cases are as follows:—

	No. of infecting cases discharged.	No. of infecting cases, each followed by—					Total No. of Return cases.
		One R. Case.	Two R. cases.	Three R. cases.	Four R. cases	Five R cases.	
Hospital cases.	55	40	11	2	1	1	77
Home. cases.	3	3	—	—	—	—	3

HOSPITAL ACCOMMODATION.

A report on the isolation hospital will be found on page 64.

WHOOPING COUGH.

This serious epidemic disease is like all the other important epidemic diseases showing a reduced mortality. In England and Wales the mortality has fallen from 539 per million in the years 1875—1879 to 129 per million in 1920—24, i.e., a reduction of 77 per cent. in 50 years.

In Birmingham the reduction has been substantial as will be seen on the chart opposite page 58. It has been greatest in the suburban districts, but even now the mortality is heavy in the central areas where there is great need for careful nursing among the poor.

Death-Rate per 1,000 from Whooping Cough.

	1925.	1912-15.	Average Rates. 1916-20.	1921-25.	* Decrease.
Central Wards	.46	.44	.43	.36	18%
Middle Ring	.21	.24	.23	.19	21%
Outer Ring	.10	.14	.12	.07	50%
City	.23	.27	.23	.19	30%

* 1921-25 compared with 1912-15.

Ages at Death.

	1921.	1922.	1923.	1924.	1925.
Under 1 year	50	147	17	78	94
Between 1 and 2 years	26	135	16	65	83
,, 2 ,, 3 ,, ...	5	46	6	23	23
,, 3 ,, 4 ,, ...	6	16	3	10	9
,, 4 ,, 5 ,, ...	1	5	1	6	9
Over 5 years	5	7	1	3	4
Totals (Average 171)	93	356	44	185	222

It will be seen that 222 children died from the disease during 1925. A very much larger number have been left permanently damaged in various ways.

It will be noted that the mortality rate last year was .46 per 1,000 in the central district, while it was 0.10 in the suburban area. Carelessness and ignorance in nursing these cases are the main causes of this difference. If every child could be properly looked after while suffering from Whooping Cough the mortality would decline to almost a vanishing point.

An arrangement has been made by the Public Health Committee whereby those cases of Whooping Cough which come to the knowledge of the Health Visiting Staff and which require special nursing are referred to the District Nursing Society and the nursing is paid for by the Public Health Department.

DIPHTHERIA.

This disease has been prevalent during the whole year and its diagnosis has been particularly difficult.

The only good thing which has to be recorded is that only 5 per cent. of the cases died, while formerly about 30 per cent. of those attacked died.

Diphtheria Cases and Deaths.

	Cases Notified.	Case-rate per 1,000 of Population.	Deaths.	Death-rate per 1,000.	Case Mortality per cent.
1901-05	991	1.28	160	.20	16
1906-10	1,210	1.48	149	.18	12
1911-15	1,125	1.30	155	.18	14
1916-20	1,065	1.19	143	.16	13
1921-25	1,651	1.76	109	.12	7
1916	951	1.07	116	.13	12
1917	770	.86	112	.13	14
1918	881	1.02	160	.18	18
1919	970	1.05	126	.14	13
1920	1,755	1.93	201	.22	11
1921	1,652	1.80	120	.13	7
1922	1,285	1.39	89	.10	7
1923	1,537	1.65	139	.15	9
1924	1,887	1.97	100	.10	5
1925	1,896	2.00	95	.10	5

The death-rate and case-rate during the past 25 years are indicated on the chart opposite page 58.

The increase in incidence has been greatest in the central areas as shown in the figures following.

CASES NOTIFIED PER 1,000 OF THE POPULATION.

	1925.	Average rate 1912-15.	1916-20.	1921-25.	* Increase or Decrease.
Central Wards	2.72	0.89	1.13	2.23	+ 150%
Middle Ring	2.14	1.13	1.30	1.83	+ 62%
Outer Ring	1.01	1.74	1.14	1.16	— 33%
City	2.00	1.28	1.19	1.76	+ 37%

* 1921-25 compared with 1912-15.

The mortality has decreased in the suburban wards at a greater rate than in the central wards, as will be seen from the following figures:—

DEATHS PER 1,000 OF POPULATION.

	1925.	Average rate. 1912-15.	1916-20.	1920-25	*Decrease.
Central Wards	.15	.20	.16	.15	25%
Middle Ring	.12	.19	.20	.13	32%
Outer Ring	.04	.20	.13	.08	60%
City	.10	.19	.16	.12	37%

* 1921-25 compared with 1912-15.

The case mortality, that is, the deaths per 1000 cases has been as follows:—

	1925.	1912-15.	1916-20.	1920-25.
Central Wards	6%	22%	14%	7%
Middle Ring	5%	16%	15%	7%
Outer Ring	4%	12%	12%	7%
Whole City	5%	15%	13%	7%

It will be seen that the case mortality is now about equal in the suburbs and in the more central areas.

AGE INCIDENCE.

Ages.	Cases Notified.	Deaths Registered.	Case Mortality per cent.
Under 1 year	35	6	17
Between 1 and 2 years	89	10	11
Between 2 and 3 years	135	10	7
Between 3 and 4 years	139	14	10
Between 4 and 5 years	150	14	9
Between 5 and 10 years	617	32	5
Between 10 and 15 years ...	366	7	2
Between 15 and 20 years ...	131	0	—
20 years and over	234	2	1
Total ...	1,896	95	5

Of the 1,896 cases, 1,627 were removed to hospital.

It is almost true to say that no child ought to suffer from Diphtheria if it is properly immunised. The people in Birmingham are not eager to have their children immunised, because this entails a subcutaneous inoculation on three occasions at least. While the children are well they do not take the trouble. Dr. Harries on page 64 of this report shows what can be done with the staff at the Fever Hospital in the way of preventing those who are daily in attendance on the patients from contracting the disease. In many American cities this work of immunising the children is being very actively taken up. In New York 230,441 children have been immunised during the past five years, and the mortality has been reduced to one half of what it was during a similar period ten years ago.

Several residential schools have been immunised during 1925, and the results are being carefully recorded. At least one visit will have to be made to these schools annually to immunise the year's entrants.

One of the greatest difficulties experienced during 1925 was the admission into hospital of children who were not suffering from Diphtheria. These children were sent in because their doctor had swabbed the throat and got a positive result from the Laboratory. They were carriers and in the majority of cases non-virulent carriers who are incapable of damaging others. A great deal of expense is incurred and some amount of danger to the patients by admitting these cases. It has always been a regulation of the hospital to admit cases of Diphtheria without any delay, because by prompt treatment it is possible to save many lives.

INFLUENZA.

The mortality from Influenza during the past 25 years is shown below :—

	Deaths.	Rate per 1,000.
1901-05	102	.13
1906-10	150	.18
1911-15	115	.13
1916-20	780	.88
1921-25	317	.34
1916	146	.16
1917	98	.11
1918	2172	2.50
1919	1062	1.15
1920	421	.46
1921	134	.15
1922	442	.48
1923	264	.28
1924	375	.39
1925	370	.39

The ages at death were as follows :—

Ages.	1921.	1922.	1923.	1924.	1925.	Total.
0—5	14	29	18	22	19	102
5—10	2	3	1	4	5	15
10—15	—	3	5	4	5	17
15—20	4	14	8	9	8	43
20—25	1	13	7	5	11	37
25—35	8	47	13	30	18	116
35—45	26	53	29	47	41	196
45—55	16	74	39	64	60	253
55—65	25	76	42	64	79	286
65—75	24	78	64	70	78	314
75—85	12	45	33	44	38	172
85 upwards	2	7	5	12	8	34
Totals	134	442	264	375	370	1585

Arrangements are in force by which Diphtheria Anti-toxin is issued free of charge from the Public Health Department, the City Bacteriological Laboratory and 13 Police Stations in the more outlying parts of the City.

CITY BACTERIOLOGICAL LABORATORY.

A Bacteriological Laboratory is maintained by the Corporation in Lodge Road, Hockley, at which examinations are made free of charge in connection with the following diseases :—

Diphtheria.
Enteric Fever.
Tuberculosis.
Cerebro-spinal Fever.
Malaria.
Dysentery.
Food Poisoning.
Anthrax.
Venereal Diseases.

The following return of work done at the Laboratory has been prepared by Dr. H. G. M. Henry, the City Bacteriologist :—

Diphtheria swabs	27,245
Sputum for tubercle bacilli	2,604
Examinations in connection with venereal diseases	8,308
Milks, bacteriological examinations	1,804
Waters ,, ,, ...	246
Shell fish ,, ,, ...	20
Widal reaction for enteric fever	35
Faeces examinations	22
Miscellaneous examinations	305
Totals	40,589

The Laboratory was opened in 1921, and its work has now grown to large dimensions, as shown in the figures below :—

	Total samples examined.	Cost of the Laboratory.	Cost per sample.
1921	8,172	£2,756 16 0	6/9
1922	6,107	£2,643 6 2	8/8
1923	9,526	£3,119 5 4	6/7
1924	13,049	£3,108 18 11	4/9
1925	40,589	£4,213 16 2	2/1

CITY HOSPITALS.

The following statement shows the cases dealt with during the 52 weeks which constitute the statistical year :—

Scarlet Fever.

	1925	1924.	1923.	1922.
Under treatment at beginning of year	237	264	309	347
Admitted during year	1,474	1,675	1,801	2,092
Discharged	1,482	1,674	1,806	2,098
Died	21	28	40	32
Remaining at end of year	208	237	264	309

Diphtheria.

	1925.	1924.	1923.	1922.
Under treatment at beginning of year	358	198	211	198
Admitted during year	1,986	1,766	1,401	1,088
Discharged	2,007	1,510	1,294	1,001
Died	98	96	120	74
Remaining at end of year	239	358	198	211

Note.—These figures include a certain number of cases in which the diagnosis was revised in hospital.

REPORT ON THE CITY HOSPITALS.

By Dr. E. H. R. Harries, Medical Superintendent.

I beg to submit to you a report upon the work of the City Hospitals for the year ending December 31st, 1925.

Although a certain number of cases of scarlet fever were directly admitted to Little Bromwich Hospital, and a small number of cases of diphtheria to Lodge Road Hospital, and transfers from one hospital to the other took place to meet temporary exigencies of space, the main work at the former hospital has been the treatment of diphtheria, and of the latter, the treatment of scarlet fever.

At the end of 1924 there were 51 cases of convalescent scarlet fever remaining at Witton Hospital. These cases were discharged very shortly afterwards, and Witton Hospital has remained closed throughout the year for infectious diseases.

It became necessary, however, to open the one-acre block opposite the hospital for the reception of the sole case of Small Pox notified during the year. The patient, a man of 62 (successfully vaccinated in infancy, but not since) had typical small pox of the present mild type. He made an uninterrupted recovery.

A number of contacts to this case were revaccinated, and kept under observation at Witton. No further case of the disease developed.

The total figures for each of the hospitals are as follows:—

SCARLET FEVER.

	Little Bromwich.		Lodge Road.	
Remaining on Dec. 31st, 1924	135		51	
Direct admissions during 1925	320	327	1181	1225
Transferred cases	7		44	
Discharged during 1925	448		1061	
Died during 1925	8		15	
Remaining on Dec. 31st, 1925	6		197	

DIPHTHERIA.

	Little Bromwich.		Lodge Road.	
Remaining on Dec. 31st, 1924	352		0	
Direct admissions during 1925	1994	2005	5	41
Transferred cases	11		36	
Discharged during 1925	2018		41	
Died during 1925	98		0	
Remaining on Dec. 31st, 1925	241		0	

SMALL POX.

	Witton Hospital. (1 acre block).
Remaining on Dec. 31st, 1924	0
Admitted during 1925 (1 case, 5 contacts)	6
Discharged during 1925	6
Remaining on Dec. 31st, 1925	0

In addition to the above, 5 cases of other diseases were admitted as such to Little Bromwich Hospital.

SCARLET FEVER.

The crude total of direct admissions of this disease admitted to both hospitals was 1,501. 155 of this total necessitated a revision of diagnosis; the net number of cases of scarlet fever admitted therefore becomes 1,346. The net number of deaths from scarlet fever, allowing for revision of diagnosis, was 19. The case mortality rate based upon the corrected admission figure, and the corrected number of deaths was therefore 1.4 per cent. On the whole, scarlet fever throughout the year was of the current mild type. There were, however, several cases of the malignant or hyper-toxic form of the disease. Two of the most severe of these came from a children's home at the end of a long series of admissions. Exaltation of virulence by passage was very noticeable in this series of cases which commenced with types of ordinary severity and culminated in two hyper-toxic cases both of which were happily saved by the administration of scarlet fever anti-toxin. (*vide infra*).

In my last report to you the hope was expressed that it would be possible in the account of the work for the succeeding year, to record a more definite opinion of the value of the " Dick " test and scarlet fever anti-toxin. A very large amount of work has been carried out during the year, both at Little Bromwich and Lodge Road Hospitals, with scarlet fever toxin and anti-toxin. It may be of interest and value if some short account is here given of the new discoveries in scarlet fever.

A. THE " DICK " TEST.

This test—like the Schick test in diphtheria—indicates susceptibility or otherwise of the person tested to the toxin produced by the organism which is now accepted universally as the cause of scarlet fever, viz.: the hæmolytic streptococcus isolated by Dr. and Mrs. Dick. This organism grows in the throat and produces the symptoms and signs to which the name " scarlet fever " is given. In the vast majority of cases of scarlet fever, especially at the present time, the conditions from which the patient suffers are produced solely by the distribution into his tissues of a soluble toxin produced by the organisms growing in the throat. This is the type known as " simple " scarlet fever, and is a purely toxic process. But the patient may also be attacked by the organisms themselves. This is especially liable to occur in young children who are the subjects of enlarged tonsils and adenoids. If such is the case, the patient not only suffers from the results of the distribution of the toxin, but also has to contend against the effects of pus formation commencing commonly in an infected pad of adenoids. The pus so produced may escape forward through the nose as a nasal discharge, or it may track laterally down the Eustachian tubes and so infect the middle ear, giving rise to acute mastoid trouble, or most dangerous of all, the pus may track directly downwards through the larynx and trachea setting up a condition of broncho pneumonia which is very fatal to young children.

Large numbers of tests have been carried out in the wards of the City Hospitals with the purpose of ascertaining the correct dilution of toxin to employ. It is obviously important to work with a dilution which is neither too strong nor too weak. Too strong a dilution would label as susceptible to scarlet fever people who would probably only contract the disease if they became the subjects of an overwhelming infection; too weak a dilution would " pass " as immune persons who would not be immune to the amount of scarlet fever toxin set free after an average infection of a susceptible person by the organisms of the disease. So far the great difficulty with the " Dick " test has been this matter of standardisation of strength of dose. No laboratory animal has yet been discovered which can be employed for testing the strength of the toxin.

There are clearly many occasions in an infectious diseases hospital and elsewhere when it is important to know who are immune and who are not immune to scarlet fever. The " Dick " test gives us this information with reasonable certainty. But although this knowledge of itself is important, it becomes still more so if advantage is taken of it to protect those who are shown by the test to be susceptible.

It is found that the great majority of patients during the first two or three days of the attack of scarlet fever give, as might be expected, a positive test. Obviously they must have been susceptible to acquire the disease. As the acute stage of the attack passes, the tissues of the patient develop in ever-increasing amounts an anti-toxin which neutralises the toxin causing the disease, and so brings about in the majority of cases a natural cure. By about the third week after the commencement of the attack the great majority of scarlet fever patients have produced a sufficient amount of anti-toxin in the blood not only for their own protective needs, but as shown in the earlier days of the new work on scarlet fever, this anti-toxin produced by convalescent patients could be used for the treatment of acute cases of the disease. The anti-toxin so produced appears to remain in the tissues for life. Comparative tests that we have made go to show that the degree of immunity possessed by a person is as great three or even thirty years after attack as it is in three weeks. Persons tested many years after a definite attack of scarlet fever still show evidence of great immunity, as indicated by a negative Dick test, and by the presence of scarlet fever anti-toxin in the blood; hence the rarity of genuine second attacks of scarlet fever.

B. The Schultz Charlton Test.

If a small quantity of the blood serum of a person who has had, at some time, a definite attack of scarlet fever be injected into the thickness of the skin of a person who has a rash believed to be that of scarlet fever, there will appear in from 6 to 12 hours after injection an area of blanching around the site of the injection if the rash be that of Scarlet Fever. This is the Schultz Charlton test: it only occurs if the rash, which is simply toxin distributed into the skin, is the rash of scarlet fever. The reaction consists in the neutralisation of the toxin present in the small area of skin by the anti-toxin contained in the serum. The Schultz Charlton test has two important employments. (1) In conjunction preferably with the "Dick" test in the diagnosis of difficult cases, and (2) in testing the relative strength of curative anti-toxins which have been obtained by immunising horses.

C. Scarlet Fever Anti-Toxins.

While, as has already been stated, the serum of a convalescent patient contains scarlet fever anti-toxin, and can therefore be used for treatment, it is hardly necessary to point out the disadvantages and difficulties of this method. During the year very great advances have been made in the laboratories in this country and in America in the production of potent horse anti-toxins. We have had the opportunity of testing numbers of batches of these anti-toxins before they were released for general use. There is no doubt that treatment of the toxæmia of scarlet fever will be revolutionised, as has been the treatment of the toxæmia of diphtheria, by the use of anti-toxin. With the exception of one serum for which it is claimed that it will also influence directly the septic process when this is present, the sera so far produced have a *direct* effect only in the neutralisation of toxin and an *indirect* effect only upon septic processes by relieving the patient of the necessity of fighting the toxæmia by the unaided resistance of his tissues. The results of the use of scarlet fever anti-toxin are particularly dramatic in the severe toxic type of case, and should scarlet fever unhappily revert, as it has on previous occasions, to a severe type with high mortality, there will be in readiness a remedy which will reduce this mortality very considerably. But even in the mild type of the disease, the damage wrought by scarlet fever toxin to heart and kidney tissues is in the aggregate enormous in amount. The timely neutralisation of scarlet fever toxin by curative doses of anti-toxin is undoubtedly going to diminish this damage to a very large extent. In our series of cases treated with scarlet anti-toxin, complications have been practically absent.

The extra cost involved in the employment of scarlet fever anti-toxin on a considerable scale will be more than offset by the lessened period for which it will be necessary to detain patients in hospital.

D. Immunisation Against Scarlet Fever.

Immunisation against scarlet fever as is now the case in diphtheria, may be either passive or active. It is now possible to protect susceptible children who have been exposed to scarlet fever by means of small doses of scarlet fever anti-toxin. The protection so conferred will last, with reasonable certainty, for a fortnight. After this period the temporary immunity wanes. The advantage of passive immunity is that protection can be afforded in 24 hours: the disadvantage is obviously the temporary nature of the protection. Nevertheless the method has great uses in cases where it is important to gain rapid control of an outbreak of scarlet fever in an institution. During the period of safety so afforded, the necessary arrangements can be made for avoiding repetition of infection.

Active immunity to scarlet fever can be, and is being produced, by the injection at regular intervals of increasing numbers of " skin test " doses of scarlet toxin. The number of " skin test " doses is based upon the amount of toxin used for the " Dick " test. Immunity by this method can be produced in a fortnight. Whilst the duration of immunity produced by this method has not yet been determined with certainty, there is evidence to show that it will, at any rate, hold good for 18 months or 2 years.

It is hoped before next year to have a nursing staff completely immune to scarlet fever.

Diphtheria.

It will be noted that the number of admissions to hospital with a diagnosis of diphtheria is very large. The number of direct admissions which with the exception of 5 cases, all went to Little Bromwich Hospital, was 1,999. Revisions of diagnosis were made in 290 cases, in which there was no evidence of either clinical or bacteriological diphtheria. (There was a considerable number of cases also in which the evidence of clinical diphtheria was very doubtful). If these 290 cases are subtracted from the total, the net number of cases of diphtheria becomes 1,709. The net number of deaths from the disease amounted to 76, of which 39 died within 48 hours of admission. The case mortality rate therefore becomes 4.4 per cent., but if these 39 hopeless cases for which no treatment could be of any avail, since they were moribund on admission, be removed, the case mortality rate becomes only 2.2 per cent.

In 772 instances the practitioner had, before notifying the case for removal to hospital, obtained a positive bacteriological report of a swab from the nose or throat. It goes without saying that large numbers of cases of diphtheria, probably the majority, can be diagnosed, and are diagnosed, on clinical grounds alone. Amongst these naturally fall the most obvious and frequently the most severe examples of the disease. In too many cases the doctor has been called in for the first time so late that the prospects of successful treatment are either non-existent or remote. Those cases in which a swab was taken prior to notification, although including some in which the delay entailed by this procedure undoubtedly prejudiced the chances of recovery of the patient, consisted in the main of mild types with indefinite or anomalous physical signs, but included also large numbers of cases of purely bacteriological "diphtheria."

The existence of this latter group of " carriers " constitutes an undoubted difficulty under the conditions of general practice, especially since the public is now inclined to regard a positive report upon a swab as synonymous with the *disease* diphtheria. The problem of accommodation raised by the admission of large numbers of these cases has sometimes been no easy one to solve: but fortunately it has been possible after investigation to discharge many of them after a short stay in hospital. Whilst a good many of these bacteriological cases could be shown to be temporary " carriers " of harmless organisms, yet some were found to belong to the dangerous class of immune carriers of toxic bacilli. There is no doubt that this latter type of case may constitute a danger to the community, and that every effort should be made to terminate their carrier state.

Of the 772 cases in which the doctor had obtained a positive bacteriological report before notification and admission to hospital as diphtheria, 391 (or 50.5 per cent) were found on admission to have no clinical evidence of the disease.

In a small proportion of these cases anti-toxin had been administered by the doctor before admission to hospital, and therefore it is possible that the physical signs seen by him in the first place had cleared up in the interval, but in the main they were cases of bacteriological diphtheria associated or not with some other pathological condition of the throat. An examination of the different age groups shows that in the lowest age group (0—5) 223, or 47 per cent. of the total admissions in the group had been swabbed before admission with positive results. 50 per cent. of these swabbed cases had no clinical evidence of the disease. In the oldest age group of patients (over 20 years of age), whose segregation in hospital frequently involved social and economic difficulties 104 (or 45 per cent.) of the total admissions in this group had been swabbed. No less than 55 per cent. of the total exhibited no evidence of diphtheria. With regard to intermediate age groups from 5—20, an average of 38 per cent. of the total admissions had been swabbed, of which an average of 48 per cent. showed no evidence of clinical diphtheria.

It has been the practice in these hospitals for the past 5 years or so to perform a Schick test on practically every case which exhibited on admission no clinical evidence of diphtheria without any necessary reference, in the first instance, to the bacteriological state. During 1925, 515 such cases were Schick tested, 259 of this total (50.5 per cent.) were found to be immune to diphtheria. The percentage of immunes in each age group followed very closely the ordinary Schick immunity curve in the general population, ranging from only 35 per cent. immune in the youngest age group (0—5) to 71 per cent. immune in the (over 20) group.

A number of swab positive cases have been analysed with reference to their state of immunity on admission. These cases may be shown most concisely in the form of a table:—

Age Group.	Number tested.	Schick + Swab +	Schick — Swab +
0—5	55	40	15
5—10	77	51	26
10—15	47	19	28
15—20	19	5	14
Over 20	45	10	35
Total	243	125	118

The organisms present in these cases, although morphologically resembling diphtheria bacilli, were not necessarily toxic. Considerable numbers of virulence tests have been carried out for us, as in previous years, by Dr. H. G. M. Henry, the City Bacteriologist. I have analysed a small group of these tests with reference to the state of immunity of the patient as shown by the Schick test. The results are set out in the following table:—

Age Group.	SCHICK POSITIVE.			SCHICK NEGATIVE.		
		ORGANISMS.			ORGANISMS.	
	Number tested.	Toxic.	Non-Toxic.	Number tested.	Toxic.	Non-Toxic.
0—5	6	—	6	9	4	5
5—10	3	—	3	8	8	—
10—15	—	—	—	5	4	1
15—20	—	—	—	1	—	1
Over 20	—	—	—	4	1	3
Total	9	—	9	27	17	10

It will be noted that in no instance was a Schick positive carrier harbouring toxic organisms, whereas in the Schick negative group there was a preponderance of carriers of toxic organisms. This is the general experience.

TREATMENT OF CARRIERS.

I have expressed the opinion on more than one occasion that the chronic carrier of diphtheria bacilli is nearly always the subject of some abnormal naso-pharyngeal condition, and it is interesting to note that this view is now very generally accepted. It is certain that the chronic carrier of the organisms of scarlet fever has similar unhealthy conditions of the naso-pharynx. It is notable that practically every "return" case of both diseases has been initiated by a discharged child who was noted to have enlarged tonsils and adenoids. The Otologist to the hospitals, Mr. Brayshaw Gilhespy, has in an increasing number of cases removed unhealthy adenoids and tonsils in both scarlet fever and diphtheria wards. We are accumulating a long series of cases in which the chronic carrier of diphtheria bacilli has ceased to carry after surgical interference.

IMMUNISATION OF STAFF.

As I have recorded in previous reports to you, the nursing staff of the City Hospitals are all Schick tested on entry, and those who are found to be susceptible to diphtheria are protected by immunising doses of toxoid anti-toxin. The effect of immunising the nursing staff produced such a notable decline in the incidence of diphtheria, that it was resolved to protect the domestic staff also. During the year under review it was possible to send all susceptible members of the staff on entry to work in scarlet fever wards until their immunisation process was complete. They were therefore not exposed, except possibly by accident, to diphtheria, until they were proved by a negative Schick test to be immune. Up to the end of 1925—432 nurses and 76 maids had been Schick tested. The nursing staff gave an average of 35.5 per cent. susceptibles, and the maids 26.3 per cent. susceptibles. Up to the end of the year, 120 members of the staff had completed an immunising course. 16 of this total, however, left before the time came for the performance of the confirmatory Schick, 3 months after the completion of the course. 103 nurses and maids who had originally been Schick positive, and therefore susceptible to diphtheria, were re-tested between 3 and 4 months after the completion of the immunising course. 97 of this total gave a frankly negative Schick test; 4 gave a positive test, which on repetition a week later had become negative. The stimulus of the first Schick test in these 4 cases had started up the dormant mechanism of anti-toxin production. They therefore also were immune.

One nurse on the second Schick test was still positive and she, after receiving a further immunising dose, became negative.

One nurse in Lodge Road hospital contracted clinical diphtheria while working in a scarlet fever ward a month after receiving her third dose of T.A.T. Her Schick test performed at the time of attack, showed that she was still positive, and a second nurse, inadvertently transferred for duty to a diphtheria ward whilst Schick positive after a course of T.A.T. contracted a mild attack of diphtheria.

The record of immunisation work amongst the staff of the City Hospitals is set out in the table below:—

Year.	Hospital.	Number of cases admitted with a diagnosis of diph.	Number of cases of Diphtheria occurring amongst			Average strength of nursing staff during each year.	Average strength of female domestic staff during each year.	
			(a) Nursing staff.	(b) Female Domestic Staff.	(c) Combined figure.			
1916	Little Bromwich	695	16	5	21	80	40	No differentiation of staff by Schick test.
1917	do.	632	16	6	22	66	33	
1918	do.	725	6	4	10	61	30	
1919	do.	799	10	3	13	64	32	
1920	do.	1349	24	8	32	98	49	
1921	do.	1301	14	5	19	108	45	
1922	do.	1090	7	3	10	108	45	Differentiation of nursing staff by Schick test—(no active immunisation) commenced Jan. 28.
1923	do.	1409	4	4	8	108	45	Differentiation of nursing staff by Schick test throughout the year. No active immunisation until last quarter.
1924	do.	1734	1	5	6	108	45	Differentiation and active immunisation of nursing staff throughout year.
1925	do.	2005	1*	0	1	80	45	Schick testing and active immunisation of both nurses and maids throughout the year.
1925	Lodge Road	Scarlet Fever	1*	0	1	45	20	All new entrants who were Schick positive remained at this hospital (L.R.) until immunisation was complete, then transferred to L. Bromwich if required.

*Note above.

After 5 years or more experience of the Schick test I can still say that no definitely Schick negative reactor has ever contracted clinical diphtheria. It is satisfactory to state also, that the confidence of the staff in the value of the test and of the protection afforded by immunisation is very great. We have no difficulty at all in obtaining the consent of members of the staff to submit to the Schick test and to the process of immunisation if required. Up to the end of the year the Schick testing of three large Institutions for children and the immunisation of susceptibles has been completed by members of the medical staff of the City Hospitals. It is hoped next year to give a much fuller account of both diphtheria and scarlet fever immunisation work.

In conclusion I should like to say that the large amount of investigation carried out both in diphtheria and scarlet fever during the year has only been possible as a result of the keenness and cooperation of the Medical Officers, and it should be added, of the nursing staff. I would especially like to mention in this connection Dr. W. M. Macfarlane, Senior Assistant Medical Officer, and Dr. Dorothy Hervey, and Dr. Vera Fellowes.

DIARRHŒA AND ENTERITIS.

There were 276 deaths from these diseases divided up as follows :—

Under 1 year	171 deaths.
1 to 2 years	30 ,,
2 to 5 years	11 ,,
5—55 years	35 ,,
Over 55 years	29 ,,

Meteorological and other data in regard to 1925 and the preceding 10 years are shown in the following table, where it will be noticed that the Summer of 1925 was what might be called an ordinary one so far as the absence of extremes is concerned.

	Deaths from Diarrhœa and Enteritis.	Death-rate per 1,000.	Highest Temp. of the Air.*	Days with Temp. of 75 Fahr. or over.*	Maximum Soil Temperature (4ft.)*	Amount of Rain in inches.*	Days with 0.01 or more of Rain.*
1915 ...	684	0.77	74.6	0	54.3	8.34	44
1916 ...	489	0.55	82.1	14	54.8	5.42	36
1917 ...	366	0.41	78.4	5	54.0	9.74	55
1918 ...	445	0.51	81.3	13	55.9	9.83	54
1919 ...	260	0.28	83.0	12	55.0	8.44	39
1920 ...	309	0.34	73.0	0	53.0	7.59	53
1921 ...	442	0.48	89.2	27	57.0	5.54	27
1922 ...	224	0.24	71.5	0	52.8	13.45	55
1923 ...	261	0.28	91.9	15	54.2	9.50	49
1924 ...	231	0.24	84.5	2	53.0	10.33	63
1925 ...	276	0.29	85.7	12	55.0	9.97	46

* In the third quarter of the year.

Diarrhœal diseases are now relatively unimportant, as compared with the huge mortality occasioned in bygone years. The death-rate in 1897 was 2.86, in 1898, 2.37, and in 1899, 2.74, compared with 0.28, 0.24 and 0.29 during the past three years when the death-rate was about one-tenth of that in the years of heavy mortality. The outstanding meteorological difference between these two periods was the small rainfall in the years of high mortality, but even a dry hot summer does not now result in anything like the high mortality to which it formerly gave rise.

The mortality from Diarrhœal diseases in various parts of the City and the great reduction which has taken place are clearly shown in the statement below :—

Diarrhœa and Enteritis (All Ages).

Death-rates per 1,000 of Population.

		Average rate,			
	1925.	1912-15.	1916-20.	1921-25.	* Decrease.
Central Wards ...	0.60	1.60	0.80	0.57	64%
Middle Ring ...	0.24	0.68	0.39	0.26	62%
Outer Ring ...	0.10	0.28	0.19	0.14	50%
City	0.29	0.79	0.42	0.31	61%

* 1912-15 compared with 1921-25.

It is significant that even last year the mortality was 6 times as great in the Central Wards as it was in the Outer Ring.

TUBERCULOSIS.

Good progress is being made in the reduction in the number of new cases of Tuberculosis.

For the first time the number of new cases of Pulmonary Tuberculosis notified is less than 1,500. Ten years ago about 3,000 persons used to be attacked annually by this dangerous complaint. That is to say that we now are getting about one-half as many fresh cases as occurred 10 years ago.

We still have an accumulation of cases numbering 13,341 on our Tuberculosis Register, of whom 11,554 are cases of Pulmonary Tuberculosis. Most of these patients have been at some time or other in a sanatorium and have been instructed in methods of preventing the spread of infection. Their lives are thereby prolonged, and in a majority of cases their earning capacity is fairly good.

The following table shows the year in which each of the 11,554 cases was first notified—some of them, it must be remembered, commenced to be ill before notification became compulsory.

Cases of Pulmonary Tuberculosis on the Register, December, 1925.

Notified in	Males.	Females.	Total.
1912	248	389	637
1913	263	327	590
1914	282	350	632
1915	269	365	634
1916	353	393	746
1917	387	379	766
1918	460	418	878
1919	617	378	995
1920	675	471	1,146
1921	389	398	787
1922	385	361	746
1923	455	437	892
1924	556	470	1,026
1925	601	478	1,079

From the above table it will be seen what a large proportion of the cases of Pulmonary Tuberculosis remain on our lists for long periods. No less than 2,500 have been on the books for more than 10 years.

Of the cases notified during the 10 years 1912-1921, nearly 6,800 have been removed from the Register as arrested—the criterion of arrest being freedom from cough and sputum for five years and return to earning capacity. Moreover, the actual number arrested is probably considerably greater than we know of because many recovered patients are lost sight of.

The total cases notified as suffering from Pulmonary Tuberculosis in the three years, 1915-17, was 9,489. In the three years, 1923-25, the number notified was 5,056. This represents a reduction in the new cases of Pulmonary Tuberculosis of 47 per cent.

The ages at which these cases were notified are set out below:—

Cases of Pulmonary Tuberculosis.

	Males.		Reduction	Females.		Reduction
Ages.	1915-17.	1923-25.	per cent.	1915-17.	1923-25.	per cent.
0—5	93	50	46	100	38	62
5—15	1103	328	70	1133	280	75
15—20	318	217	32	339	217	36
20—25	407	254	38	512	356	30
25—35	1069	547	49	1070	607	43
35—45	1086	616	43	812	421	48
45—55	593	506	15	366	199	46
55 up	311	298	4	177	122	31
Totals	4980	2816	43%	4509	2240	50%

Similarly the deaths during these two periods were as follows:—

Deaths from Pulmonary Tuberculosis.

	Males.		Reduction	Females		Reduction
Ages.	1915-17.	1923-25.	per cent.	1915-17.	1923-25.	per cent.
0—5	43	38	12	30	28	7
5—15	39	24	38	74	40	46
15—20	76	82	+ 8	112	117	+ 4
20—25	156	130	17	159	162	+ 2
25—35	430	295	31	306	297	3
35—45	627	419	33	309	193	38
45—55	452	397	12	197	136	31
55 up	299	264	12	108	102	6
Totals	2122	1649	22%	1295	1075	17%

It will be noted from these tables that the greatest reduction in notifications and deaths both among males and females occurs in the age group 5—15 years.

On the whole there has been a 43 per cent. reduction in new cases among males and a 22 per cent. reduction in deaths during the interval of five years, which elapsed between the two periods. Among females the reduction in new cases was 50 per cent. and in deaths 17 per cent.

The figures given in the next table indicate the relative prevalence of pulmonary tuberculosis in various areas in the City, and the amount of reduction in those areas during the past 14 years.

Pulmonary Tuberculosis.

Cases Notified per 1,000 of Population.

	Year 1925.	1912-15.	Average 1916-20.	1920-25.	* Decrease.
Central Wards	2.33	6.48	5.18	2.76	57%
Middle Ring	1.43	4.26	3.23	1.75	59%
Outer Ring	1.12	2.65	2.28	1.29	51%
City	1.57	4.33	3.27	1.86	57%

*In 1920-25 compared with 1912-15.

It will be noted that in all three divisions of the City there has been a reduction of over 50 per cent. in the new cases of Pulmonary Tuberculosis, but that even now the incidence is more than twice as great in the Central Wards as it is in the Outer Ring.

Statistics in regard to Tuberculosis for 1925 and certain other years are set out below :—

Tuberculosis (All Forms).

	New Cases Notified in 1925.	Deaths not Notified as Cases.
Pulmonary Tuberculosis	1,491	60
Tubercular Meningitis	43	30
Tubercle of the Abdomen	55	12
Tubercle of the Spinal Column	29	4
Tubercle of the Joints	42	2
Disseminated Tuberculosis	18	5
Tubercle of the Glands and other parts	119	9

Cases and Deaths from Tuberculosis (All Forms).

	Cases Notified.	Deaths.	Death-rate in Birmingham.	Death-rate in England & Wales.
1916	3,830	1,324	1.48	1.53
1917	3,543	1,405	1.56	1.62
1918	3,254	1,385	1.60	1.69
1919	3,116	1,188	1.28	1.26
1920	2,974	1,001	1.10	1.13
1921	2,247	1,035	1.13	1.13
1922	1,961	1,049	1.13	1.12
1923	2,166	1,006	1.08	1.06
1924	2,129	1,055	1.10	1.06
1925	1,797	1,083	1.14	—

Cases and Deaths from Pulmonary Tuberculosis.

	Cases Notified.	Deaths.	Death-rate in Birmingham.	Death-rate in England & Wales.
1908	—	1,021	1.24	1.12
1909	—	1,008	1.22	1.09
1910	—	898	1.08	1.01
1911	—	958	1.14	1.08
1912	4,394	1,088	1.28	1.04
1913	4,229	1,041	1.19	1.01
1914	3,317	1,059	1.20	1.04
1915	3,027	1,141	1.28	1.16
1916	3,388	1,107	1.24	1.18
1917	3,074	1,169	1.30	1.25
1918	2,905	1,171	1.35	1.34
1919	2,704	1,019	1.10	1.00
1920	2,609	843	.93	.89
1921	1,969	890	.97	.88
1922	1,669	899	.97	.89
1923	1,785	860	.92	.84
1924	1,780	934	.97	.84
1925	1,491	930	.98	—

The decrease in the death-rate from Tuberculosis during the past 25 years is indicated in the figures below:—

	Pulmonary.	Other forms.	Total.
1901-1905	1.34	.45	1.79
1906-1910	1.16	.35	1.51
1911-1915	1.22	.29	1.51
1916-1920	1.18	.22	1.40
1921-1925	0.96	.15	1.11

The Incidence-rate and Death-rate from Pulmonary Tuberculosis in males and females are shown below:—

	Incidence-rate.		Death-rate.	
	Males.	Females.	Males.	Females.
1921	2.49	1.85	1.27	0.71
1922	2.08	1.55	1.27	0.71
1923	2.21	1.65	1.17	0.70
1924	2.20	1.54	1.25	0.72
1925	1.88	1.29	1.26	0.73

Distribution of Pulmonary Tuberculosis.

		Case-rate per 1,000 in 1925.	
Central Wards ...	St. Paul's	1.54	Average 2.25
	St. Mary's	2.37	
	Duddeston and Nechells	2.22	
	St. Bartholomew's	2.44	
	St. Martin's and Deritend	3.41	
	Market Hall	1.90	
	Ladywood	1.85	
Middle Ring ...	Lozells	1.59	Average 1.43
	Aston	2.05	
	Washwood Heath	1.37	
	Saltley	1.34	
	Small Heath	1.44	
	Sparkbrook	1.09	
	Balsall Heath	1.58	
	Edgbaston	1.09	
	Rotton Park	1.62	
	All Saints'	1.10	
Outer Ring ...	Soho	1.19	Average 1.12
	Sandwell	0.97	
	Handsworth	1.47	
	Erdington North	1.49	
	Erdington South	0.92	
	Yardley	0.99	
	Acocks Green	1.06	
	Sparkhill	1.34	
	Moseley and King's Heath	0.75	
	Selly Oak	1.14	
	King's Norton	1.01	
	Northfield	1.47	
	Harborne	0.81	

Other Forms of Tuberculosis.

	Cases Notified.	Deaths.	Death-rate in Birmingham.	Death-rate in England & Wales.
1906	—	295	.37	.50
1907	—	343	.43	.47
1908	—	287	.35	.47
1909	—	248	.30	.45
1910	—	270	.32	.42
1911	—	272	.32	.38
1912	—	204	.24	.33
1913	967	300	.34	.34
1914	498	234	.27	.32
1915	491	236	.27	.35
1916	442	217	.24	.35
1917	469	236	.26	.37
1918	349	214	.25	.35
1919	412	169	.18	.26
1920	365	158	.17	.24
1921	278	145	.16	.24
1922	292	150	.16	.23
1923	381	146	.16	.23
1924	349	121	.13	.22
1925	306	153	.16	—

Comparative Incidence and Mortality from Tuberculosis in 1924.

(*Registrar-General's Figures.*)

Towns.	Case-rate per 1,000, all forms of Tuberculosis.	Mortality-rate per 1,000. All forms.	Pulmonary only.	Non-pulmonary.
London	2.25	1.16	0.98	.18
*Glasgow	2.79	1.40	1.01	.39
Birmingham	2.28	1.11	0.94	.17
Liverpool	3.63	1.53	1.24	.29
Manchester	2.91	1.51	1.20	.31
Sheffield	3.46	1.03	0.81	.22
Leeds	2.94	1.41	1·09	.32
*Edinburgh	2.94	1.32	0.99	.33
Bristol	2·59	1.14	0.92	.22

*From Annual Reports of Medical Officers of Health.

PREVENTION OF TUBERCULOSIS.

The splendid reduction in the number of new cases of Tuberculosis is probably not entirely due to any one cause. There is considerably less chance of coming in contact with an infectious consumptive now than formerly because a larger number are isolated in sanatoria and hospitals. Most of the patients too who live at home know better how to prevent the spread of infection. This isolation is important and should be maintained.

Another cause which undoubtedly operates to an important extent is the knowledge now possessed by the people of how to live more wholesome lives and how to live in such a way as to be able to resist the infection. This better knowledge is in part due to the superior intelligence of the masses, but it is also due to the propaganda work which has been going on in the homes of the people for more than 20 years.

In cases of tuberculosis the home is visited by a specially trained nurse whose duty it is among other matters to give information to the patient and his friends and relatives as to how to maintain such a state of health as will increase resistance against tubercular infection. Again when such a patient sees a doctor or goes to the Tuberculosis Dispensary or to the Sanatorium he is again instructed.

During the whole course of an attack of Pulmonary Tuberculosis the patient is constantly being reminded by his medical man or by the tuberculosis visitors of his duty to himself and to others. Obviously there are some patients who do not appreciate the need of long continued application of the advice given, but for most cases the repeated appeal is taken seriously and acted upon.

No less than 45,000 visits were paid by the tuberculosis visitors to the homes of consumptives in 1925. For this purpose there are now 13 nurses employed. Some indication of their work is given in the figures below:—

New cases reported	1,905
Primary visits paid to civilians	1,917
,, ,, ex-soldiers	43
Periodic re-visits paid to civilians	23,777
,, ,, ex-soldiers	4,255
Special re-visits	13,182
Useless calls	3,395
Total calls	46,569

Patients provided with a shelter during year	46
,, recommended for extra nourishment	135
,, ,, additional bed	147
Nuisances Reported to Sanitary Inspectors	370
Houses disinfected	2,227

With the housing shortage so extremely acute as it is in Birmingham there has been a real difficulty in getting for many infectious consumptives the accommodation necessary. The degree of overcrowding in the houses occupied by some of the consumptives is indicated in the fact that no less than 1,100 of the new patients notified last year were sharing a bed with some other person, while 402 other cases shared a bedroom, though using a separate bed.

Beds are hired out or lent to those consumptives who have no other means of separating the sick from the healthy. At present 496 beds complete are on hire, and 436 on loan.

TREATMENT OF TUBERCULOSIS.

The next statement shows the number of persons examined by the Medical Staff at Broad Street Centre:—

Tuberculosis Patients Examined at Broad Street Centre.

	New Patients.	Contacts or Suspects.	Old Patients Re-examined.
Completed examinations	1165	1970	3597
Number recommended for Sanatorium treatment ...	606	308	497
,, ,, ,, Observation	90	216	7
,, ,, ,, Dispensary	49	38	174
,, ,, ,, Dispensary supervision ...	2	3	721
,, ,, ,, Domiciliary	105	53	449
,, ,, ,, Light treatment out-patient	2	6	9
,, ,, ,, Home Treatment for disease other than Tuberculosis	1	2	96
Number recommended for Hospital treatment other than Tuberculosis	1	—	1
No treatment required	309	1344	1643
Incomplete examinations	467	972	537
Total Examinations	1632	2942	4134

X-Ray examinations were made in 3,276 cases.

The number of patients sent to the different Sanatoria is given in the statement below:—

Patients Treated at Sanatoria.

	Yardley Road.	Salterley Grange.	Romsley Hill.	West Heath.	Total.
In sanatorium at beginning of year	308	48	91	76	523
Admitted during year	969	195	290	336	1,790
Discharged	836	187	296	213	1,532
Died	161	1	16	104	282
Remaining at end of year	280	55	69	95	499

In addition to the above, 60 cases were admitted to the Woodlands and Forelands (Cripples' Union) and 13 to the General Hospital, 7 to the Queen's Hospital, 33 to the Children's Hospital, 3 to the Orthopœdic Hospital, 9 to Moseley Hall Convalescent Home, 6 to the Jaffray Hospital, 7 to St. Gerard's Hospital at Coleshill, and 9 to the Shropshire Orthopœdic Hospital at Oswestry.

The number of patients who attended at Broad Street Centre for out-patient treatment (in most cases after a previous stay at a sanatorium) was as follows :—

TREATMENT AT BROAD STREET DISPENSARY.

New patients attending for treatment	534
Total attendances of old and new patients	21,065
Number of patients sent to the Light Treatment Department	147
Number of patients who completed a course of light treatment	26

THE ANTI-TUBERCULOSIS CENTRE.

(Report by Dr. G. B. DIXON, Chief Tuberculosis Officer).

The Anti-Tuberculosis Centre is open daily for five days during the week, and on Saturday for half a day. There are four evening sessions each week. New patients are examined and old patients are re-examined by appointment during the morning and afternoon; treatment is given during the evenings to those who are working, and in the afternoon to children and those women and men who are not working. Those patients who are unable to attend for examination are visited and examined by members of the medical staff at their own homes. Consultations are also held between doctors and the Chief Tuberculosis Officer at the patients' own homes. On return from Sanatoria, patients are again seen at the Centre where many continue to attend as out-patients; some, however, return to their own doctors. The patients attending the Centre are examined from time to time, and those old patients who have discontinued regular attendance are re-examined after varying intervals of time.

ATTENDANCES AND EXAMINATIONS OF PATIENTS.

During the year 1925, the total number of attendances both for the purpose of diagnosis and treatment, was 35,191, the total attendances for treatment alone were 21,065; the total number of examinations was 10,850, and in addition there were 3,276 X-Ray examinations. As compared with last year there was a slight decrease in the number of attendances for treatment, and an increase in the number of examinations.

During the year we examined 1,165 newly notified cases of pulmonary tuberculosis out of the 1,554 persons who were notified to the Medical Officer of Health as suffering from this disease; this figure indicates that 74.9 per cent. of all the notified cases of pulmonary tuberculosis in the City were examined at the Centre during the year. In addition, 2,296 return cases, i.e., those who had been treated in previous years, were re-examined, as well as 1,483 " suspect " cases and 487 " contact "; we also examined during the year 1,301 patients who had completed a course of treatment. No less than 1,056 patients were examined in their own homes.

TREATMENT RECOMMENDED.

In the two tables below, the types of treatment recommended for the different categories of adults and children are shown, and in the two latter tables the same patients are classified according to the Group of their disease. In these tables the last two items in each deal with those patients who required treatment for disease other than tuberculosis, or for whom no treatment was considered necessary.

ADULT PATIENTS.

	Newly notified cases.	Old cases on re-examination.	"Suspect" cases.	"Contact" cases.	Total.
Sanatorium Observation	59	5	109	3	176
Sanatorium	560	447	238	17	1262
Domiciliary	100	443	52	—	595
Dispensary	27	124	9	3	163
Dispensary supervision	1	552	2	—	555
Light Treatment—out-patient	1	6	2	1	10
Home Treatment for disease other than tuberculosis	1	89	1	1	92
Hospital Treatment for disease other than tuberculosis	—	1	—	—	1
No treatment required	226	1398	674	105	1289
	975	3065	1087	130	4143

CHILDREN.

	Newly notified cases.	Old cases on re-examination.	"Suspect" cases.	"Contact" cases.	Total.
Sanatorium observation	31	2	57	47	137
Sanatorium	46	50	37	16	149
Domiciliary	5	6	—	1	12
Dispensary	22	50	14	12	98
Dispensary supervision	1	169	—	1	171
Light Treatment—out-patient	1	3	2	1	7
Home Treatment for disease other than tuberculosis	—	7	—	—	7
Hospital Treatment for disease other than tuberculosis	1	—	—	—	1
No Treatment required	83	245	286	279	706
	190	532	396	357	1288

CLASSIFICATION OF PATIENTS ACCORDING TO GROUP OF DISEASE.

ADULTS.

	Newly notified cases.	Old cases re-examined.	Suspects and Contacts.	Total.
*Group I.	56	432	44	532
Group II.	178	874	133	1185
Group III.	438	600	174	1212
Group IV.	43	21	19	83
No definite signs of active pulmonary tuberculosis	260	24	847	1131
	975	1951	1217	4143

CHILDREN.

	Newly notified cases.	Old cases re-examined.	Suspects and Contacts.	Total.
*Group I.	15	134	26	175
Group II.	16	110	38	164
Group III.	15	57	14	86
Group IV.	38	33	33	104
No definite signs of active pulmonary tuberculosis	106	11	642	759
	190	345	753	1288

*In certain instances patients included in the various Groups are suffering from other forms of tuberculosis in addition to pulmonary, but for convenience are classified as pulmonary cases when this type of the disease is present in association with other forms.

WORKING CAPACITY WHEN FIRST EXAMINED.

In the following tables the patients referred to us for treatment are again sub-divided into adults and child patients, and the working capacity of the different types of patient in each sub-division is shown. It is interesting to note that among the adults 31.2 per cent. were sent to us whilst their working capacity was still unimpaired, and only 15.5 per cent. came to us when totally incapacitated. In the case of the children this point is more emphasised; 62.2 per cent. had an unimpaired working capacity and 3.5 per cent. were totally incapacitated, the working capacity indicated here being the ability or otherwise to attend school regularly.

ADULTS.

	Newly notified cases.	Old cases.	Suspects and Contacts.	Total.
Unimpaired working capacity	222	359	715	1,296
Impaired working capacity	455	1,358	389	2,202
Totally incapacitated	298	234	113	645
				4,143

CHILDREN.

	Newly notified cases.	Old cases.	Suspects and Contacts.	Total.
Unimpaired working capacity	97	115	590	802
Impaired working capacity	70	221	149	440
Totally incapacitated	23	9	14	46
				1,288

FAMILY HISTORY.

A survey of the family and social history of the 5,431 patients submitted to us for examination and treatment during the year shows that there was no history of existing tuberculosis or knowledge of relatives dying of, or suffering from, tuberculosis in connection with 2,954 or 54.4 per cent. In 2,477 or 45.6 per cent. there was a history of some near relative or intimate friend either being affected with tuberculosis, or having succumbed to it. In 299 instances or 5.5 per cent. the relative affected was the father, and in 218 or 4 per cent. the relative affected was the mother, and 484 or 8.9 per cent. the brother or sister was affected. In 899 instances two or more relatives were known to have suffered from tuberculosis.

DENTAL TREATMENT.

The services of a part-time dental surgeon are utilised at the Centre for the necessary treatment of our patients. The treatment is conservative in type, and consists mainly of extractions, fillings and scalings. There is no fund to assist in the provision of artificial dentures. Those patients who wish to provide their own can do so under conditions advantageous to themselves by arrangement with the dentist. The condition of the teeth and gums of most of our patients is carefully noted, and in the table below is briefly summarised the dental condition of patients seen during the year so far as dental caries, masticatory power, and the state of the gums were concerned. The dental surgeon informs me that there were 771 extractions, 26 fillings and 45 scalings, and dentures were supplied in 65 instances.

CONDITION OF TEETH AND GUMS.

Number of Teeth with infected pulp chambers.			Masticatory power in Molars and Bicuspeds.			State of Gums.		
None.	1 to 4.	More than 4.	Six or more.	Less than 6.	None.	Healthy.	Gingivitis.	Pyorrhœa.
1,468	3,067	520	3,042	1,414	610	3,397	912	754

SPUTUM RESULTS.

Amongst the adult patients suffering from tuberculosis there were 990 or 23.8 per cent. who presented tubercle bacilli in their sputum, and amongst the children there were 17 or 1.3 per cent. whose sputum was positive for tubercle bacilli.

In the two tables below the sputum conditions of all patients referred to us during the year are summarised. They are sub-divided into adults and children, and are arranged to show the sputum conditions of the different types of patient.

ADULTS.

	Notified cases.	Old cases on re-examination.	Suspects and Contacts.	Total.
Tubercle Bacilli present	426	413	151	990
Tubercle Bacilli absent	306	1,062	657	2,025
No Sputum	243	476	409	1,128
				4,143

CHILDREN.

	Notified cases.	Old cases on re-examination.	Suspects and Contacts.	Total.
Tubercle Bacilli present	2	10	5	17
Tubercle Bacilli absent	34	70	174	278
No Sputum	154	265	574	993
				1,288

LABORATORY WORK AT CENTRE.

In the Laboratory during the year there were 8,143 specimens of sputum examined; there were 87 other specimens also examined. Of sputum specimens 2,060 which were previously negative after one staining were examined by the concentration method of Davis, the results being as follows:—

Tubercle Bacilli demonstrated after 1st concentration ...	47 or 4.06%
,, ,, ,, ,, 2nd ,, ...	11 or 1.19%
,, ,, ,, ,, 3rd ,, ..	No change.
No change after 4th, 5th or 6th concentration.	

LABORATORY WORK—YARDLEY ROAD SANATORIUM.

We examined during the year 2,534 specimens of urine and 4,762 specimens of sputum. Of the sputum specimens examined 1,038 presented tubercle bacilli after staining alone, and the remaining 3,724 specimens were tested by the sedimentation method devised by Ellerman and Erlandsen. Of these 1,120 or 30% after this test were found to contain tubercle bacilli; these were not found in every instance after one examination and in some cases the test had to be repeated on several occasions before a positive result was obtained, as shown in the following table:—

Tubercle bacilli found after	1st sedimentation	in 672 instances.
,, ,, ,, ,,	2nd ,,	,, 321 ,,
,, ,, ,, ,,	3rd ,,	,, 65 ,,
,, ,, ,, ,,	4th ,,	,, 62 ,,
,, ,, ,, ,,	5th ,,	,, Nil ,,

COMPLETED CASES.

During the year 1,301 patients completed a course of treatment at the Centre, of whom 1,114 were adults and 187 were children.

WORKING CAPACITY.

In the following tables the change between the working capacity at the commencement and termination of treatment of the patients differentiated into Groups of disease, is shown for both adults and children.

ADULTS.

	Group I.	Group II.	Group III.	No definite signs of active tuberculosis	Total
Unimpaired working capacity becoming impaired ...	4	3	—	—	7
Unimpaired becoming totally incapacitated	—	—	—	—	—
Unimpaired capacity persisting	10	2	—	—	12
Impaired capacity becoming unimpaired	43	59	6	1	109
Impaired capacity becoming totally incapacitated ...	2	16	46	1	65
Impaired capacity persisting	112	282	260	8	662
Totally incapacitated becoming impaired	8	51	100	3	162
Totally incapacitated becoming unimpaired	—	4	3	1	8
Totally incapacitated persisting	1	16	69	3	89
					1,114

CHILDREN.

	Group I.	Group II.	Group III.	No definite signs of active tuberculosis	Total
Unimpaired working capacity becoming impaired ...	2	1	—	1	4
Unimpaired becoming totally incapacitated	—	—	—	—	—
Unimpaired capacity persisting	3	—	—	1	4
Impaired capacity becoming unimpaired	15	10	2	5	32
Impaired capacity becoming totally incapacitated ...	2	1	3	1	7
Impaired capacity persisting	43	42	18	12	115
Totally incapacitated becoming impaired	4	5	3	3	15
Totally incapacitated becoming unimpaired	2	1	—	—	3
Totally incapacitated persisting	—	—	5	2	7
					187

AFTER CARE.

RESULTS OF INVESTIGATION INTO THE PRESENT CONDITION OF THE PATIENTS TREATED IN THE PAST.

In the following tables are set out, as briefly as possible, the main points in connection with an investigation undertaken to ascertain the condition of our past patients who received treatment at the Centre between the years 1913 and 1921 inclusive.

Amongst the patients treated during the year 1913 at the Centre, 655 or 39.8 per cent. of the total are still working. The mortality is very much higher amongst those whose sputum contained tubercle bacilli.

PRESENT CONDITION OF PATIENTS TREATED IN PREVIOUS YEARS WHOSE SPUTUM CONTAINED TUBERCLE BACILLI.

Year.		No. of patients treated.	Now working regularly.	Working irregularly.	Totally incapacitated.	Known to have left City.	Lost all trace.	Known to have died.
1913	...	504	23.9%	6.9%	2.4%	2.9%	26.4%	37.5%
1914	...	573	28.0%	10.8%	1.2%	6.8%	11.7%	41.5%
1915	...	309	23.9%	11.1%	2.3%	6.0%	15.1%	41.6%
1916	...	207	27.0%	8.6%	.4%	7.6%	10.6%	45.8%
1917	...	212	29.7%	14.6%	.5%	7.1%	10.4%	37.7%
1918	...	191	26.7%	13.1%	1.0%	11.5%	7.9%	39.8%
1919	...	219	22.4%	23.7%	.5%	4.1%	6.4%	42.9%
1920	...	275	20.4%	24.7%	2.8%	6.6%	3.9%	41.6%
1921	...	147	12.2%	24.5%	6.1%	4,8%	4.1%	48.3%

PRESENT CONDITION OF PATIENTS TREATED IN PREVIOUS YEARS WHOSE SPUTUM DID NOT CONTAIN TUBERCLE BACILLI.

Year.		No. of patients treated.	Now working regularly.	Working irregularly.	Totally incapacitated.	Known to have left City.	Lost all trace.	Known to have died.
1913	...	1141	35.7%	8.1%	.9%	5.8%	34.7%	14.8%
1914	...	895	55.7%	7.1%	1.5%	6.1%	17.8%	11.8%
1915	...	1222	55.1%	6.1%	1.3%	6.3%	16.8%	14.4%
1916	...	996	60.0%	6.6%	.5%	8.3%	15.1%	9.5%
1917	...	812	20.4%	24.7%	2.8%	6.6%	3.9%	41.6%
1918	...	820	51.3%	13.1%	.7%	9.3%	15.4%	10.2%
1919	...	773	50.9%	22.6%	.5%	6.7%	11.0%	8.3%
1920	...	795	50.4%	27.3%	.5%	5.7%	8.7%	7.4%
1921	...	645	48.9%	28.4%	3.1%	5.7%	6.5%	7.4%

SUMMARY OF REPORT.

1. There was an increase in the total number of patients' attendances during the year 1925, as compared with 1924.

2. No less than 74.9 per cent. of the total number of those notified in the City as suffering from pulmonary tuberculosis, during the year, were examined at the Centre.

3. We visited and examined 1,056 of our patients in their own homes.

4. The number of contacts and suspects examined during the year was 1,970 as compared with 1,165 newly notified patients.

5. During the year 3,276 X-ray examinations of our patients were made.

6. Amongst the adult patients suffering from tuberculosis 23.8 per cent presented tubercle bacilli in their sputum, whilst only 1.3 per cent. of the children had sputum in which these bacilli were present.

7. Of the patients treated during the four years 1918-1921 who had no tubercle bacilli in their sputum 50 per cent. are now in full work, i.e., after an interval of from five to eight years, while another 23 per cent. are working irregularly.

On the other hand, of those who had tubercle bacilli in their sputum during the same years only 20.4 per cent. are in full work, and 21.5 per cent. are working irregularly.

SANATORIA FOR TUBERCULOSIS.

REPORT BY DR. G. B. DIXON, CHIEF TUBERCULOSIS OFFICER.

The Birmingham Public Health Committee has 588 beds available for the treatment and prevention of pulmonary tuberculosis. These beds are distributed in four different Sanatoria, namely, Yardley Road Sanatorium, West Heath Sanatorium, Salterley Grange Sanatorium, Cheltenham, and Romsley Hill Sanatorium, Halesowen. The three former are the property of the City, but in the latter, which belongs to the Birmingham Hospital Saturday Fund, 93 beds are rented. The Yardley Road Sanatorium is situated in a suburban part of the City, about 3½ miles from its centre, and has accommodation for 325 patients. The beds are available for male and female adults and children. There are 154 beds for male adults, 10 of which are reserved for the admission of patients for observation purposes, and the remainder are utilised for the treatment of those in the intermediate and advanced stages of tuberculosis. There are 52 beds provided for female adults, including 8 beds reserved for observation purposes. The female patients admitted are those in the early and intermediate stages of tuberculosis. There are 119 beds for the treatment of children, and included in these are 15 beds available for the purpose of observation. Children in all stages of tuberculosis are admitted.

The West Heath Sanatorium is situated about 6 miles from the centre of the City; it contains 102 beds, 78 of which are set apart for the treatment of female adult patients suffering from advanced tuberculosis, while 24 beds are available for male patients.

The Salterley Grange Sanatorium, with 68 beds, is situated in the Cotswold Hills, about 3½ miles from Cheltenham, and has accommodation for 36 males and 32 females. The patients selected are all of adult age, and are the most promising from a medical standpoint of all our patients, the majority suffering from tuberculosis in an early stage.

Romsley Hill Sanatorium is the property of the Birmingham Hospital Saturday Fund, and is situated in the Clent Hills, 11 miles from the centre of the City. The Birmingham Health Committee rent 93 beds for the admission of their patients, 63 for males and 30 for female adults. Those in all stages of the disease are admitted.

Admission to these different Sanatoria is arranged by the staff of Tuberculosis Officers, after examination of the patients at the Municipal Anti-Tuberculosis Centre, 44a, Broad Street. The treatment given to patients in the Sanatoria is on similar lines, and includes hygienic and dietetic treatment, graduated rest, exercise and occupation, the employment of appropriate drugs when indicated, or specific treatment by means of the various tuberculins and vaccines, etc. Heliotherapy, treatment by ultra-violet rays, and artificial pneumothorax are undertaken in suitable cases.

TOTAL NUMBERS TREATED IN THE SANATORIA AND DURATION OF STAY.

During the calendar year 1925, there were 1,771 patients discharged from all the Sanatoria. Of this number 960 were adult males, 563 were adult females and 114 were male children and 134 were female children.

The average durations of stay in days for male, female and child patients in the Sanatoria were as follows:—115.2 days for males, 110.2 days for females, and 147.1 days for children.

OBSERVATION PATIENTS.

The beds reserved for the purpose of observation are at the Yardley Road Sanatorium, and vary in number from time to time, the average being about thirty.

Observation patients are those who, after careful and repeated examinations at the Centre, are found to be indefinite, either as to the absence or presence of tuberculosis, or as to its activity or otherwise when present, and are usually admitted for a period varying from two to four weeks. Of the 1,771 treated in all the Sanatoria 243 or 13.7 per cent. were admitted primarily for observation to Yardley Road Sanatorium. The medical findings after varying periods of observation in connection with these patients are set out in the following table:—

	Positive diagnosis.	Negative diagnosis.	Total.
Adult Males	20	53	73
Adult Females	11	40	51
Children	36	83	119
	67=27.5%	176=72.5%	243

DISCHARGED PATIENTS, TABULATED ACCORDING TO SEX AND AGE.

In the following table the patients have been classed according to their sex and age. It will be seen that the largest number of our patients are included in the age period between twenty and twenty-five years.

	Females.	Males.
Under 10 years	76	74
11 to 15 ,, ...	66	49
16 to 20 ,, ...	83	79
21 to 25 ,, ...	128	118
26 to 30 ,, ...	86	123
31 to 35 ,, ...	69	97
36 to 40 ,, ...	79	146
41 to 45 ,, ...	54	132
46 to 50 ,, ...	27	117
51 to 55 ,, ...	19	76
56 to 60 ,, ...	4	41
Over 60 ,, ...	6	22
	697	1,074

CLASSIFICATION OF PATIENTS' DISEASE.

In this table the patients are scheduled according to the classification of the Ministry of Health, as follows:—

GROUP I.—Cases with slight constitutional disturbance, if any, e.g., there should not be marked acceleration of pulse nor elevation of temperature except of very transient duration; gastro-intestinal disturbance or emaciation, if present, should not be excessive.

The obvious physical signs should be of very limited extent as follows:—either present in one lobe only and in the case of an apical lesion of one upper lobe not extending below the second rib in front or not exceeding an equivalent area in any one lobe; or where these physical signs are present in more than one lobe, they should be limited to the apices of the upper lobes and should not extend below the clavicle and the spine of the scapula.

No complication (tuberculous or other) of prognostic gravity should be present. A small area of dry pleurisy should not exclude a case from this group.

GROUP III.—Cases with profound systemic disturbance or constitutional deterioration; with marked impairment of function, either local or general, and with little or no prospect of recovery.

All cases with grave complications, whether tuberculous or not, should be classified in this Group, e.g., diabetes, tuberculosis of larynx or intestine, etc.

GROUP II.—All cases which cannot be placed in Groups I. and III.

Patients suffering from non-pulmonary tuberculosis are classified according to the site of the lesion and are placed under Group IV.

	Group I.	Group II.	Group III.	Group IV.	No active signs.
ADULT MALES.					
Yardley Road Sanatorium	22	107	359	13	53
Salterley Grange Sanatorium	34	72	15	1	—
Romsley Hill Sanatorium	15	84	107	—	—
West Heath Sanatorium	8	19	51	—	—
ADULT FEMALES.					
Yardley Road Sanatorium	20	53	50	13	40
Salterley Grange Sanatorium	20	35	9	—	—
Romsley Hill Sanatorium	7	38	55	—	—
West Heath Sanatorium	7	42	170	4	—
CHILDREN.					
Yardley Road Sanatorium	35	58	42	25	83
West Heath Sanatorium	—	1	4	—	—
	168	509	862	56	176

SPUTUM.

Out of the total number of adult patients discharged from the Sanatoria during the year, 966 or 63.4% presented tubercle bacilli in their sputum whilst in the Sanatoria.

	No sputum persisting	No sputum becoming T.B.—	No sputum becoming T.B.+	T.B.— persisting.	T.B.— becoming T.B.+	T.B. – becoming no sputum	T.B.+ persisting.	T.B.+ becoming T.B.—	T.B + becoming no sputum.	Totals
Yardley Road Sanatorium	13	3	3	103	13	4	338	18	6	501 Adult Males.
	37	—	2	22	1	16	45	4	9	136 Adult Females.
	100	3	2	11	—	31	7	4	2	160 Children.
										176 Negative diagnosis.
										973
Romsley Hill Sanatorium	1	2	—	41	2	3	147	8	2	206 Adult Males.
	6	2	—	21	1	3	57	4	6	100 Adult Females.
										306
Salterley Grange Sanatorium	12	1	1	31	5	18	37	2	15	122 Adult Males.
	17	1	1	4	—	8	20	4	9	64 Adult Females.
										186
West Heath Sanatorium	2	—	—	25	3	1	41	4	2	78 Adult Males.
	22	4	1	35	5	6	134	10	6	223 Adult Females.
	1	—	1	1	—	—	2	—	—	5 Children.
										306

OCCUPATIONS.

In the following table the occupations of both male and female adult patients are shown.

	Males.	Females.
Out-door occupations	86	13
Domestic occupations	20	253
Sedentary occupations	74	61
Commercial occupations	37	15
Engineering trade	192	73
Metal trade	212	60
Building trade	63	1
Other trades	276	87
	960	563

TREATMENT CARRIED OUT WHILST IN SANATORIA.

The majority of the patients treated in the Sanatoria during the year accepted the treatment advised by the medical officers. In 1,122 instances, extensions of the treatment primarily advised were accepted. There were 73 patients who left the Sanatoria against medical advice, and 6 were dismissed. Deaths in Sanatoria numbered 281, the great majority of which occurred amongst patients in the " hospital beds " provided for those with advanced and acute disease.

	Remaining full time recommended.	Extension of time accepted.	Left against medical advice.	Left before time with M.O.'s consent.	Dismissed.	Died.
Adult Males	138	567	41	28	3	183
Adult Females	73	349	24	27	3	87
Children	21	206	8	2	—	11

PULMONARY CONDITION AFTER TREATMENT.

In the following table is shown the condition of the patients' pulmonary disease on discharge. A description of the different terms is given in the report of the work in connection with the Anti-Tuberculosis Centre.

	Disease inactive.	Disease improved.	Disease Stationary.	Disease progressing.	Dead.	No active signs.	Obs. left before diagnosis made.
ADULT MALES.							
Yardley Road Sanatorium ...	62	193	51	46	149	49	4
Romsley Hill Sanatorium ...	5	93	67	34	7	—	—
Salterley Grange Sanatorium	47	56	11	8	—	—	—
West Heath Sanatorium ...	17	25	3	7	26	—	—
ADULT FEMALES.							
Yardley Road Sanatorium ...	32	77	10	13	4	40	—
Romsley Hill Sanatorium ...	3	42	27	22	6	—	—
Salterley Grange Sanatorium	28	27	2	6	1	—	—
West Heath Sanatorium ...	23	71	24	29	76	—	—
CHILDREN.							
Yardley Road Sanatorium ...	86	49	8	7	9	80	4
West Heath Sanatorium ...	1	1	—	1	2	—	—
	304	634	203	173	280	169	8

ILLNESSES PREVIOUS TO ADMISSION.

In 146 or 9.6 per cent. instances, adult patients had a history of having suffered from pleurisy at periods varying from one to twelve years prior to their examination by us. In 154 or 10.11 per cent. of the adult patients there was a history of pneumonia having occurred from one to twelve years previously. Large numbers of patients attributed the onset of their tuberculosis to an attack of influenza, and in the case of many of our child patients measles appears frequently as a probable predisposing cause of tuberculosis.

GAIN OR LOSS IN WEIGHT.

Amongst a total of 1,771 patients discharged from the Sanatoria, many of whom were advanced hospital cases, having been admitted for the purpose of prophylaxis, 89 or 5 per cent. remained stationary, and 1,520 or 85.8 per cent. gained weight in amounts varying from one to fifty pounds.

WORKING CAPACITY.

The working capacity of patients is shown in the following table:—

	Males.	Females.	Children.	Total.
Unimpaired capacity for work becoming impaired ...	—	—	1	1
Unimpaired capacity persisting	4	1	1	6
Impaired capacity for work becoming unimpaired ...	43	28	19	90
Impaired capacity for work becoming totally incapacitated	76	47	9	132
Impaired capacity persisting	502	255	106	863
Total incapacity becoming impaired	122	66	15	203
Total incapacity becoming unimpaired	3	3	1	7
Total incapacity persisting	157	124	13	294
No active signs	53	39	83	175
	960	563	248	1771

SUMMARY.

The average duration of patients' stay for all the Sanatoria, was 115.2 days for males, 110.2 days for females, and 147.1 days for children.

Of the patients discharged from all the Sanatoria during the year no less than 13.7 per cent. had passed through the observation beds at Yardley Road Sanatorium.

The largest number of our patients in any hemidecade were those drawn from the age period 20 to 25 years.

Over 48 per cent. of the patients discharged were in Group III., 28 per cent. were in Group II., and 9 per cent. were in Group I.

There were 63.4 per cent. of our total discharged patients who presented tubercle bacilli in their sputum whilst in the Sanatoria. The number who showed bacillary loss, decided after three examinations was 115 or 12.2 per cent.

Over 85 per cent. of all the patients discharged from Sanatoria gained weight in amounts varying from one to fifty pounds, only 5 per cent, remaining stationary.

THE LIGHT DEPARTMENT, YARDLEY ROAD SANATORIUM.

Report by Dr. G. B. Dixon, Chief Tuberculosis Officer.

The Light Clinic at the Yardley Road Sanatorium is a detached building situated within the Sanatorium grounds, which is divided into two sections. One contains a large waiting room where relatives who accompany patients can be accommodated, and where patients may rest for a time before leaving the building. It also includes a doctor's room, where patients are examined, a sister's room where clinical records, etc., are kept, and in addition there is a room where photographic records are taken.

The other section includes two treatment rooms, in each of which there are two 75 amp. open flame carbon arc lamps. Each of these rooms is capable of accommodating 6 or 8 sitting patients, or 3 recumbent patients. The ante-room to the treatment rooms contains the patients' dressing cubicles, and leading from it is the sanitary annex, containing two shower baths, and W.C.

The clinic is open daily on five days weekly from 9 a.m. to 6 p.m. and on Saturdays from 9 a.m. to 2 p.m.

It is utilised for the treatment of patients resident in the Sanatorium, and for others who are patients at the Anti-Tuberculosis Centre, many of the latter having been Sanatorium patients. Every patient treated in the light clinic suffers from tuberculosis in one form or another. The majority of our patients are afflicted with bone or joint tuberculosis, laryngeal tuberculosis, glandular tuberculosis, lupus, etc. In some cases pulmonary tuberculosis is also associated.

The patients before receiving, and during treatment, are carefully examined physically, and when necessary, radiographically. Ordinary photographic records are also made in suitable cases. Pulse and temperature records are also recorded. As a preliminary to therapeutic irradiation the patients' skin re-action to the effect of artificial light is always tested by exposing small areas of the skin for varying periods and noting the re-action as indicated by erythema. When this information is acquired the initial period of exposure is decided upon. Primarily the patients feet and legs are exposed, then the arms, next various aspects of the trunk, until the whole surface of the body is irradiated.

Our artificial light is derived from four open flame carbon arc lamps, consuming 75 amperes, designed by Professor Reyn, of Copenhagen. Direct current is used for these lamps. The voltage is 65.

One pair of lamps is fitted with two plain carbons, and the other pair is used with one mineral cored carbon and one plain carbon. The latter lamps, in their output of ultra-violet rays, show a definitely higher intensity than do the lamps fitted with plain carbons.

In addition to these we have a lamp fitted with one tungsten and one carbon pole, of four amperes, the voltage for which is 220.

The larger lamps are used entirely for giving the patients a general bath, i.e., the whole body is exposed to their rays; the tungsten arc lamp is used almost entirely for the administration of localised applications of artificial light.

For those patients whose lesions are multiple and in whom pulmonary disease is associated with other forms of tuberculosis, it is inadvisable to give too prolonged exposures. Where pulmonary tuberculosis is an associated lesion, if a thin vest is worn to protect the thorax, there is less likelihood of a reaction occurring as evidenced by rise of temperature, accelerated pulse rate, increase of cough, expectoration, etc.

If these precautions are observed suitable cases of combined pulmonary and laryngeal tuberculosis, when the pulmonary lesion is not particularly active, may show marked laryngeal improvement, as a result of artificial light treatment.

Non-Pigmentors.

In the case of non-pigmentors more than ordinary care has to be observed in treatment if satisfactory results are to be obtained. The period of exposure should be definitely shorter than for those who pigment well, and increases in dosage should be less frequent and of shorter duration.

It is noticeable that in some non-pigmentors, although progress is slower, the tuberculous lesion shows definite improvement, as a result of irradiation, and provided the lesion shows definite improvement, it would appear that non-pigmentation alone is an insufficient reason in every case, for withholding this form of treatment.

Eye Protection and Shower Baths.

When in the Light Bath the patients wear goggles or shades to protect the eyes, a loin cloth, and wooden-pattens. After irradiction each ambulatory patient has a shower-bath and rub down, and remains in the waiting-room, for a time after dressing, and before leaving. Couch patients who are immobilised on frames and splints, and who cannot therefore be given a shower bath are rubbed down.

Cases Treated.

The Light Clinic was opened for the treatment of patients during the last week of November, 1924. From that time until the 31st December, 1925, one hundred and forty-seven patients received treatment. They included fifty-four adult males, forty adult females, and fifty-three children.

PATIENTS COMPLETING A SATISFACTORY COURSE OF TREATMENT.

Up to the 31st December, 1925, twenty-six patients had satisfactorily completed a course of treatment, twelve of them were adults, and fourteen were children. They included twelve cases of bone and joint tuberculosis, nine cases of tuberculous adenitis, two cases of lupus, one case of combined pulmonary and laryngeal tuberculosis, a case of hilus tuberculosis with corneal ulceration, also a case of tuberculous epididymitis. All of these cases received Sanatorium treatment and artificial light treatment concurrently, some continued to attend at the Clinic for artificial light treatment as out-patients, after leaving the Sanatorium.

In four of the cases suffering from bone tuberculosis, abscesses or discharging sinuses were present before treatment was commenced. Five of the cases with tuberculous adenitis presented discharging sinuses. After the conclusion of treatment there was no evidence of abscess formation in any of the cases, and where sinuses had existed they were healed.

In the cases of bone and joint tuberculosis physical and radiographic examinations showed quite satisfactory improvement, but the period of time elapsing since treatment is at present too short to speak definitely as to the permanency of results obtained.

The case of epididymitis, at the commencement of treatment, presented a discharging sinus, much enlargement of the epididymis and thickening of the cord. On completion of treatment the sinus was healed, and the swelling and thickening less.

The patient suffering from combined pulmonary and laryngeal tuberculosis made excellent progress. The laryngologist referring the case to us reported that " swelling and induration in the larynx had disappeared, and that the voice was now much clearer and stronger " ; the pulmonary condition too, was practically quiescent.

The case of combined hilus disease with corneal ulceration also made good progress.

LENGTH OF TREATMENT AND NUMBER OF EXPOSURES.

The average length of time during which these patients received artificial light treatment was approximately twenty-four weeks. The average number of exposures was approximately seventy-two, and the average gain of weight in each case was 7.9-lbs.

PATIENTS WHO DID NOT COMPLETE TREATMENT.

The patients who discontinued treatment for various reasons numbered seventeen. They included cases of tuberculous adenitis, fistula, bone and joint disease, abdominal tuberculosis, lupus, and pharyngeal tuberculosis. The majority of these were cases of long-standing disease.

On December 31st, 1925, one hundred and four patients were continuing their treatment in the Light Clinic. They included cases of bone and joint tuberculosis, tuberculous adenitis and laryngitis, lupus, pharyngeal tuberculosis, and abdominal tuberculosis. Up to the end of the year the average length of treatment approximately for each of these patients was 24.7 weeks, and many of them were showing excellent progress.

EFFECTS OF ARTIFICIAL LIGHT TREATMENT ON MENTALITY.

In several of our child patients a marked improvement in the mental aspect has been noted.

A female child, aged nine years who was admitted to the sanatorium with one arm amputated above the elbow for tuberculous disease of that joint, active tuberculous disease of a knee joint, and a maxillary antrum and bones of the face affected with tuberculosis and discharging internally and externally, was mentally much below the average. She was given appropriate treatment, i.e., " Sanatorium " treatment, immobilisation and splinting, and after a time was treated with artificial light. After irridiation a marked improvement in the child's mental condition was noticed. She became more alert, teachable, and took an active interest in what was going on around her, and is now making progress in her school work. Prior to her light treatment she was dull, uninterested and unteachable.

Another interesting case in this respect was a boy aged two years and nine months, who suffered from multiple tuberculous lesions of his bones. On admission he was exceedingly dull, was said by his parents to talk very little, and very badly, and in addition was dirty in his habits, and showed no interest in his surroundings. After receiving treatment, in addition to an improvement in his bone lesions, his mental condition improved definitely. He became cleaner in his habits, he talks much better, recognises and speaks to the different nurses and doctors in the ward, and plays with his toys, which he never did previously.

COST OF CURRENT.

The cost of electric current for the four 75 ampere carbon-arc lamps has been estimated by keeping a careful record of the hours during which the lamps are running. The most recent estimate for a period of twelve weeks showed that the total cost of current for the four lamps was between one shilling and a penny halfpenny and one shilling and a penny three-farthings per hour.

VENEREAL DISEASES.

During the year 1925, the Venereal Disease Clinics at the Skin and Urinary Hospital and at the Women's Hospital (Out-patient Department) have been closed. On the other hand the Centre at 10a, Aston Street has been enlarged so as to accommodate all married women and their babies who need attention, and a clinic was opened at the Children's Hospital on August 1st.

The new cases of syphilis (540) show a reduction on the cases in 1924 (610).

The new cases of Gonorrhœa numbered 892 against 769 in 1924. The increase in cases of Gonorrhœa is due to the large number of cases among women. This increase is probably due to the better facilities now in existence at the Aston Street Centre.

	New cases of Syphilis.				New cases of Gonorrhœa.			
Year.	Male.	Female.	Babies.	Total.	Male.	Female.	Babies.	Total.
1918	502	355	—	857	588	100	—	688
1919	782	459	—	1,241	1,399	187	—	1,586
1920	704	441	—	1,145	1,190	185	—	1,375
1921	423	343	—	766	825	131	—	956
1922	220	237	—	457	628	83	—	711
1923	296	239	—	535	666	89	—	755
1924	291	301	18	610	691	73	5	769
1925	277	240	23	540	667	220	5	892

Note.—About 90 per cent. of these cases are Birmingham residents.

The Clinics at which these persons were treated were as follows :—

	New cases of Syphilis	New cases of Gonorrhœa.	Total new cases.	Total attendances.
General Hospital	413	759	1,172	39,886
Skin and Urinary Hospital	5	25	30	2,652
Aston Street Clinic ...	108	105	213	1,321
Children's Hospital ...	14	3	17	134

Particulars of the cases treated during 1925 are given below :—

	Syphilis.				Gonorrhœa.			
	Males.	Females.	Babies.	Total	Males.	Females.	Babies.	Total
Total number of new cases	277	240	23	540	667	220	5	892
Total number of attendances	5,362	5,772	175	11,309	29,863	2,736	85	32,684
Aggregate number of in-patient days ...	313	558	—	871	302	754	—	1,056
Ceased attendance before completion of treatment	49	119	35	203	272	27	1	300
Ceased attendance after completion of treatment, but before final tests ...	22	43	—	65	144	19	9	172
Transferred to other Centres after treatment	4	17	—	21	23	8	1	32
Discharged after completion of treatment and observation	17	33	—	50	49	27	—	76
Number of patients under treatment or observation on January 1st, 1926 ...	276	137	22	435	548	153	9	710

Very good work has been done at the Clinics during the year, but the premises at both the General Hospital and Aston Street require to be improved if even better results are to be achieved.

If one assumes that each new case costs an equal amount of money to the City, and that 90 per cent. of the cases are from Birmingham, then each new case for its complete treatment costs about £6, and as the Ministry of Health refunds 75 per cent. of the cost the Public Health Department of Birmingham pays about £1 10s. 0d. per case.

The cost of Venereal Disease treatment and prevention during 1925 was as follows :—

COST OF VENEREAL DISEASES SCHEME FOR YEAR ENDING 31ST DECEMBER, 1925.

	£	s.	d.
General Hospital Clinic	3,607	6	4
Skin and Urinary Hospital Clinic	345	1	11
Women's Hospital Clinic	223	9	0
Children's Hospital Clinic	36	4	0

Cleveland House, Wolverhampton, Clinic	88 0 11
Guardians of the Poor, Wolverhampton, Clinic	16 5 0
Aston Street Clinic	840 14 2
Cost of Salvarsan	921 17 2
Cost of Gonococcal Vaccine	19 0 0
Bacteriological Laboratory	824 14 11
Grant, N.C.C.V.D.	250 0 0
Stationery and other expenses	108 12 7
	£7,281 6 0

Detailed Expenditure of Clinics, Year 1925.

	General Hospital.	Skin & Urinary Hospital.	Women's Hospital.	Children's Hospital.	Aston Street.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Medical Officers	1,061 15 7	68 15 5	115 19 0	28 7 0	207 18 0
Pathologists	—	35 17 6	107 10 0	7 17 0	—
Salaries of Orderlies, Nurses, etc. ...	706 5 10	76 13 6			231 18 8
Clerical & Administrative Salaries	269 1 11	22 8 6			—
Provision for Officers ...	205 18 3	—			—
Rent, Rates, Taxes, Light, etc.	205 10 3	29 19 0			76 9 9
Drugs	587 1 3	99 18 0			14 19 1
Dressings	65 14 10	—			8 18 0
Apparatus	213 8 0	—			89 11 10
In-Patient Days	101 4 9	7 5 0			—
Stationery, Printing, etc.	63 6 10	4 5 0			0 7 6
Laundry (Officers) ...	41 2 1	—			13 19 1
Building Alterations ...	15 15 7	—			117 12 3
Furniture	30 17 5	—			62 13 9
Employers' Liability insurance	9 9 8	—			—
Sundries	30 14 1	—			16 6 3
	£3,607 6 4	£345 1 11	£223 9 0	£36 4 0	£840 14 2

The work of prevention of Venereal Diseases has been done mainly by the Birmingham Branch of the British Social Hygiene Council, to which the Public Health Department contributes £250 per annum. This Society by its workers and lecturers aims at giving young people such information on matters of sex and disease as will enable them to develop a higher moral standard than has heretofore been attained.

The following is a brief statement from the Report of the Organisation for 1925:—

" OBJECTS :—

1. To preserve and strengthen the family as the basic social unit.
2. To emphasise the responsibility of the community and the individual for preserving or improving the quality of future generations by educative and social measures.
3. To further social customs which promote a high and equal standard of sex conduct in men and women.
4. To promote the prevention and treatment of venereal diseases by appropriate educative, medical and social measures.
5. To promote the elimination of commercialised vice.
6. To promote the removal of conditions conducing to promiscuity.
7. To co-operate with the various organisations interested in the above subjects with a view to co-ordinating efforts to secure these ends.
8. To promote educative and social measures directed toward the adaptation of the racial instinct to the conditions of civilised society.

" A much appreciated series of lectures given to members of the Women's Committee of the Midland Adult School Union opened the way for many addresses in different schools throughout the City and district, and to Girls' Clubs connected with the movement.

" Other series of lectures include those given to leaders and helpers of the Birmingham Union of Girls' Clubs and the Boys' and Girls' Union; also the West Bromwich Guardians Welfare Department.

" Addresses in factories have become quite popular. The need for teaching is shown by the number who come forward for individual advice and request for suitable literature. In this respect it is true to say that many people are harmed by want of knowledge of matters of sex.

" The Women's Co-operative Guilds and political organisations have also received Addresses and worked enthusiastically in our cause. An instance of the eagerness both to receive and give knowledge presented on the highest ground is shown in the case of a young girl, who, having heard a Factory Address, secured a room on three Sunday afternoons and invited other girls to come and hear the same. On each occasion the room was overcrowded, and a most helpful discussion followed.

" Recognising the importance of securing greater co-operation with the Clergy, the Executive Committee convened a Conference at the University. Invitations were sent to Clergy of all denominations in and around Birmingham, and a helpful Address was given by C. H. Bond, Esq., F.R.C.S., of Leicester.

" Negotiations are on foot for a Conference with the head teachers of Council and Voluntary Schools, through the courtesy of the Education Department, to whom we are also indebted for the free use of Council Schools, in order to give Addresses to parents on ' How to impart to their children the salient facts of life.' There is still some prejudice against this work, and while many teachers are alive to the urgency of the need, there are others who still consider it unnecessary and undesirable.

" An informal conference of Clergy and Medical Men was recently held to consider how each can best help to solve the problems confronting the youth of to-day."

CEREBRO-SPINAL FEVER.

During the year 7 cases were notified, and of these 6 died, while one made a complete recovery.

The following table gives the number of cases and deaths for the last few years :—

Year.	Cases notified.	Deaths.	Fatality per cent.
1917	29	21	72
1918	16	10	62
1919	14	9	64
1920	25	18	72
1921	9	7	78
1922	18	16	89
1923	4	2	50
1924	11	8	73
1925	7	6	86

The following are some of the salient facts about the cases which occurred during 1925 :—

No.	Notified.	Sex.	Age.	Treated at	Diagnosis verified bacteriologically?	Result.
1	Jan. 19	M	27	Hospital.	Yes.	Recovered.
2	Jan. 31	M	4 mths.	Hospital.	Yes.	Died Feb. 2nd.
3	Mar. 16	M	3 mths.	Home.	No.	,, Mar. 19th.
4	Apr. 8	M	7 mths.	Hospital.	Yes.	,, Apr. 4th.
5	Nov. 4	F	2	Home.	No.	,, Nov. 8th.
6	,, 25	F	2	Hospital.	Yes.	,, Dec. 6th.
7	,, 25	F	19	Hospital.	Yes.	,, Nov. 24th.

ANTERIOR POLIOMYELITIS.

There has been a marked reduction in the number of cases notified during the year, the total being 11 cases, of whom 3 died. Of these 11 cases, 7 were children under five years of age.

The following table shows the number of cases and deaths in preceding years :—

Year.	Cases notified	Died	Complete recovery (6 months)	One or more limbs paralysed (after end of year).
1917	11	2	6	3
1918	4	—	2	2
1919	14	1	6	7
1920	1	—	—	—
1921	11	4	1	6
1922	6	—	1	5
1923	33	3	1	29
1924	39	5	5	25
1925	11	3	5	3

Following are details regarding the patients notified during 1925 :—

No.	Notified.	Sex.	Age.	Result.
1	Jan. 26	F	1	Complete recovery.
2	Feb. 4	F	7	Complete recovery.
3	May 20	M	3	Complete recovery.
4	Aug. 5	F	1¼	Died July 26th.
5	,, 6	F	5	Weakening of right arm and leg.
6	,, 18	F	1	Left arm and shoulder paralysis. Right ankle and calf muscles wasting.
7	Sept. 5	M	4	Died November 14th.
8	,, 7	M	39	Died August 29th.
9	,, 26	F	2	Complete recovery.
10	,, 29	M	17	Slight weakness of right leg muscles.
11	Dec. 19	F	4	Complete recovery.

ENCEPHALITIS LETHARGICA.

During the year 92 cases were notified as Encephalitis Lethargica and accepted as such after investigation and observation, and of these 32 died.

The following table shows the number of cases and deaths since 1919, when the notification of the disease was made compulsory :—

Year.	Cases.	Deaths.	Fatality per cent.
1919	11	5	45.5
1920	18	7	38.9
1921	25	8	32.0
1922	12	4	33.3
1923	29	12	41.4
1924	282	44	15.6
1925	92	32	34.8

AGE AND SEX DISTRIBUTION OF CASES AND DEATHS.

Age groups.	Cases.		Deaths.		Total Cases.	Total Deaths.
	Males.	Females.	Males.	Females.		
Under 10 years	8	2	5	2	10	7
10—20 ,,	14	7	3	2	21	5
20—30 ,,	7	12	2	4	19	6
30—40 ,,	5	9	1	—	14	1
40—50 ,,	3	8	1	4	11	5
50—60 ,,	2	7	1	1	9	2
60 and over	4	4	3	3	8	6
Totals	43	49	16	16	92	32

AFTER EFFECTS OF ENCEPHALITIS.

It is extremely difficult to present in tabular form the after effects. This aspect of the disease was dealt with at some length in my last Annual Report. Among the cases notified during the year under review, 18 (9 males and 9 females) made a complete recovery; 13 (5 males and 8 females) show signs of the Parkinsonian Syndrome; and 3 (2 males and 1 female) are now under treatment in Mental Hospitals.

VII. MATERNITY AND CHILD WELFARE.

INFANT MORTALITY.

The infant mortality rate for Birmingham has remained about the same during the past seven years. That is to say no obvious progress has been made in its further reduction, but the fact that it has remained stationary for so long indicates that it has probably for the present become stabilized. This is very encouraging.

Further it will be noted that it is now about one-half of what it was 25 years ago. This again is satisfactory.

Infant Mortality Rate.

	Birmingham.	England and Wales.
1901-05	157	138
1906-10	131	117
1911-15	126	110
1916-20	94	91
1921-25	80	76
1916	104	91
1917	101	96
1918	99	97
1919	84	89
1920	83	80
1921	83	83
1922	86	77
1923	72	69
1924	83	75
1925	78	75

The infant mortality rate is based on the number of infants born, and is, therefore, not influenced by alterations in the age incidence of the population.

Distribution of Infant Mortality.

The appended table shows the infant mortality rate in each of the wards of the City in 1925 and in previous years:—

				Average	
		1925.	1912-15.	1916-20.	1921-25.
Central Wards:	St. Paul's	120	155	130	104
	St. Mary's	100	201	140	112
	Duddeston and Nechells	101	172	120	102
	St. Bartholomew's	106	171	124	107
	St. Martin's	107	155	116	100
	Market Hall	119	145	117	102
	Ladywood	73	143	108	87
Middle Ring:	Lozells	87	105	89	72
	Aston	104	126	101	88
	Washwood Heath	69	105	86	72
	Saltley	65	99	82	75
	Small Heath	58	93	76	66
	Sparkbrook	77	94	84	70
	Balsall Heath	64	88	79	69
	Edgbaston	70	87	75	68
	Rotton Park	53	125	93	77
	All Saints'	92	116	94	89
Outer Ring:	Soho	66	90	81	61
	Sandwell	39	84	63	61
	Handsworth	64	84	70	56
	Erdington North	54	79	62	54
	Erdington South	32	80	60	56
	Yardley	45	79	76	56
	Acocks Green	53	87	69	59
	Sparkhill	55	63	64	54
	Moseley and King's Heath	39	63	56	61
	Selly Oak	51	76	69	59
	King's Norton	66	81	62	60
	Northfield	39	84	50	54
	Harborne	42	69	66	49

The foregoing figures may be summarized as follows :—

Wards.	1925.	1912-15.	Average 1916-20.	1921-25.	*Decrease
Central Wards	104	163	122	102	37%
Middle Ring	74	104	86	75	28%
Outer Ring	50	78	65	57	27%
City	78	120	94	80	33%

*1921-25 compared with 1912-15.

It will be seen that last year the Infant Mortality rate in the Outer Ring of Wards was 50 per 1,000 births against 104 in the Central Area. In other words the rate in the Central Wards is 100 per cent. higher than in the suburbs. This 100 per cent. difference has moreover been maintained for a great many years.

The Birmingham rate of 78 is a good one, but is still capable of further reduction. It ought to be lower than 50 per 1,000 births.

INFANT MORTALITY IN OTHER TOWNS.

(*Registrar General's Figures*).

Glasgow	102
Birmingham	75
Liverpool	98
Manchester	92
Sheffield	83
Leeds	87
Bristol	76
Edinburgh	96
England and Wales	75

INFANT DEATHS BY AGE AND CAUSE.

Deaths from stated Causes in Weeks and Months under One Year of Age.

Cause of Death.	Weeks.				Total under One Month.	Months.				Total Deaths under One Year.
	0—	1—	2—	3—		1—	3—	6—	9—	
Measles	—	—	—	—	—	—	3	4	17	24
Scarlet Fever	—	—	—	—	—	—	—	—	—	—
Whooping Cough	—	—	1	2	3	10	22	25	34	94
Diphtheria and Croup ...	—	—	—	—	—	—	—	1	5	6
Influenza	—	1	—	—	1	1	—	2	4	8
Tuberculous Meningitis ...	—	—	1	—	1	1	1	6	2	11
Abdominal Tuberculosis ...	—	—	—	—	—	—	2	—	2	4
Other Tuberculous Diseases	—	—	—	—	—	—	—	3	2	5
Rickets	—	—	—	—	—	—	1	4	1	6
Syphilis	—	—	1	—	1	1	1	—	—	3
Cerebro-Spinal Fever ...	—	—	—	—	—	—	2	1	—	3
Meningitis (not Tuberculous)	1	—	—	1	2	3	6	1	5	17
Convulsions	13	3	2	1	19	8	8	9	3	47
Bronchitis	1	5	6	1	13	23	23	11	10	80
Pneumonia (all forms) ...	5	4	3	8	20	21	35	46	74	196
Gastritis	—	2	1	1	4	3	3	1	—	11
Diarrhoea, Enteritis, etc. ...	—	4	4	4	12	37	70	31	21	171
Congenital Malformations ...	25	12	3	4	44	23	4	4	1	76
Premature Birth	247	30	22	18	317	24	4	—	—	345
Atrophy, Debility and Marasmus	25	10	6	5	46	39	22	8	5	120
Atelectasis	21	—	—	—	21	—	—	—	—	21
Injury at Birth	25	2	1	1	29	3	—	—	—	32
Neglect (under 3 months) ...	6	—	—	—	6	1	—	—	—	7
Suffocation (overlying) ...	4	1	2	1	8	13	5	—	—	26
Other Causes	8	2	11	6	27	8	12	18	11	76
All Causes	381	76	64	53	574	219	224	175	197	1,389

The greatest cause of death of these infants was what is called for want of more information "Premature Birth" (345 deaths). Next in importance comes Pneumonia (196 deaths), Diarrhœa and Enteritis (171 deaths), and Marasmus (120 deaths).

INFANT MORTALITY AT DIFFERENT AGE PERIODS.

The babies who died during 1925 were 1,389 in number, and the following table gives the ages at death:—

Under 7 days ...	381 or 27 per cent.	All under one month 41 per cent.
7 days to 28 days	193 or 14 ,,	
1—3 months ...	219 or 16 ,,	
3—6 ,, ...	224 or 16 ,,	
6—9 ,, ...	175 or 13 ,,	
9—12 ,, ...	197 or 14 ,,	

These figures indicate that no less than 41 per cent. of all the deaths take place amongst children under one month of age. Stated in another way the rates of death per 1,000 births were as follows:—

All under 4 weeks	32.2
4 weeks to 3 months	12.3
3—6 months	12.6
6—9 ,, ...	9.8
9-12 ,, ...	11.0

STILLBIRTHS.

There were 609 stillbirths notified during the year against 544 in 1924 and 629 in 1923.

In all suitable cases a visit was paid to the mother in order that advice might be given her as to the best means of improving her health and guarding against the occurrence of further stillbirths.

CHILD MORTALITY.

The deaths of children between 1 and 5 years of age numbered 755 in 1925, compared with 795 in 1924.

The causes of death of these children were as follows:—

Measles	76
Whooping Cough	124
Diphtheria	48
Scarlet Fever	12
Tuberculosis	59
Bronchitis and Pneumonia	229
Diarrhœa and Enteritis	41
Burns	23
All other causes	143

Bronchitis and Pneumonia caused 229 deaths, mostly preventable, while Whooping Cough was the cause of 124 deaths, also preventable.

MATERNITY AND CHILD WELFARE CENTRES.

At the close of the year there were 22 of these centres in operation. Their situation and the times at which they were open are shown in the statement below. In the case of the Voluntary Centres the Public Health Committee contributed a sum equal to 80 per cent. of the total cost of their upkeep.

MUNICIPAL WELFARE CENTRES.

Carnegie Infant Welfare Institute, Hunters Road.

Infants and Children	Monday, Tuesday, Wednesday, Thursday, 2 to 4.
Mothers	Tuesday, Wednesday and Friday, 10 to 12.
Sewing Class	Tuesday, 2 to 4.
Cookery Class	Thursday, 2 to 4.

Dental Clinics	Tuesday and Thursday, 10 to 12. Wednesday and Friday, 2 to 4.
Test-Feeding Clinics	Wednesday and Friday, 10 to 2.
Observation Ward	

For special investigation in infants and young children and nursing or expectant mothers.

10a Aston Street.

Infants' and Children's Consultation	Monday, Tuesday and Thursday, 2 to 4.
Mothers' Consultation	Friday, 2 to 4.
Sewing Class	Wednesday, 2 to 4.

Friends' Institute, Berkeley Road, Hay Mills.

Infants' and Children's Consultation	Wednesday and Friday, 2 to 4.
Mothers' Consultation	Wednesday (2nd and 4th), 10 to 12.
Sewing Class and Weighing ...	Monday, 2 to 4.

17 Bloomsbury Street, Duddeston.

Infants' and Children's Consultation	Monday, Wednesday and Friday, 2 to 4.
Mothers' Consultation	Tuesday and Friday, 10 to 12.
Sewing Class	Tuesday, 2 to 4.

697 Bristol Road South, Northfield.

Infants' and Children's Consultation	Tuesday, 2 to 4.
Mothers' Consultation	1st Thursday, 10 to 12.
Sewing Class and Weighing ...	Friday, 2 to 4.

28 Harborne Lane, Selly Oak.

Infants' and Children's Consultation	Thursday, 2 to 4.
Mothers' Consultation	Thursday (2nd and 4th), 10 to 12.
Mothercraft and Weighing ...	Wednesday, 2 to 4.

108 Hope Street.

Infants' and Children's Consultation	Tuesday and Thursday, 2 to 4; Wednesday and Friday, 10 to 12.
Mothers' Consultation	Monday, 10 to 12.
Sewing Class and Weighing ...	Monday, 2 to 4.

186 Irving Street.

Infants' and Children's Consultation	Monday and Thursday, 2 to 4.
Sewing Class and Weighing	Tuesday, 2 to 4.
Mothers' Consultation	1st Tuesday, 2 to 4.

91 Lansdowne Street, Winson Green.

Infants' and Children's Consultation	Monday, 10 to 12; Monday, Tuesday and Thursday, 2 to 4.
Mothers' Consultation	Thursday, 10 to 12.
Sewing Class	Monday, 2 to 4.

2a Lea House Road, Stirchley.

Infants' and Children's Consultation	Wednesday, 2 to 4.
Mothers' Consultation	Tuesday (1st and 3rd), 2 to 4.
Mothercraft	Thursday, 2 to 4.
Sewing Class	Wednesday, 2 to 4.
Weighing only	Friday, 2 to 4.

41 Lichfield Road, Aston.

Infants' and Children's Consultation	Monday, Tuesday, Thursday & Friday, 2 to 4.
Mothers' Consultation	Wednesday, 2 to 4.
Sewing Class	Wednesday, 2 to 4.

1 River Street, Floodgate Street.

Infants' and Children's Consultation	Monday and Wednesday, 2 to 4.
Mothers' Consultation	Tuesday, 2 to 4.
Sewing Class	Thursday, 2 to 4.

131 St. Vincent Street, Ladywood.

Infants' and Children's Consultation	Monday and Wednesday, 2 to 4; Thursday, 10 to 12.
Mothers' Consultation	Friday, 10 to 12.
Sewing Class	Tuesday, 2 to 4.

10 Shortheath Road, Erdington.

Infants' and Children's Consultation	Monday and Tuesday, 2 to 4.
Mothers' Consultation	Thursday, 2 to 4.
Sewing Class	Thursday, 2 to 4.

113 Smith Street, Hockley.

Infants' and Children's Consultation	Monday and Friday, 10 to 12; Tuesday and Thursday, 2 to 4.
Mothers' Consultation	Wednesday and Thursday, 10 to 12.
Sewing Class	Wednesday, 2 to 4.

76 Stratford Road, Sparkbrook.

Infants' and Children's Consultation	Monday, Wednesday and Friday, 2 to 4; Thursday, 10 to 12.
Mothers' Consultation	Tuesday, 10 to 12.

92 Trinity Road, Witton.

Infants' and Children's Consultation	Monday and Friday, 2 to 4.
Mothers' Consultation	Monday, 10 to 12.
Sewing Class and Weighing ...	Tuesday, 2 to 4.

Friends' Institute, Warwick Road, Greet.

Infants' and Children's Consultation	Wednesday and Friday, 2 to 4.
Mothers' Consultation	Monday, 2 to 4.
Sewing Class	Monday, 2 to 4.

74 Washwood Heath Road, Saltley.

Infants' and Children's Consultation	Tuesday, Thursday and Friday, 2 to 4; Wednesday, 10 to 12.
Mothers' Consultation	Monday and Tuesday, 10 to 12.
Sewing Class	Monday, 2 to 4.

106 Wright Street, Small Heath.

Infants' and Children's Consultation	Monday and Wednesday, 2 to 4.
Mothers' Consultation	Thursday, 2 to 4.
Sewing Class	Thursday, 2 to 4.

VOLUNTARY WELFARE CENTRES.

6 Holyhead Road, Handsworth.

Infants' and Children's Consultation	Monday and Thursday, 2 to 4.
Mothers' Consultation	Wednesday (alternate), 2 to 4.
Sewing Class and Weighing ...	Wednesday, 2 to 4.

42 Wentworth Road, Harborne.

Infants' and Children's Consultation	Monday and Wednesday, 2 to 4.
Mothers' Consultation	Wednesday (alternate), 10 to 12.
Sewing Class	Thursday, 2 to 4.

During the year two Centres—Floodgate Street Centre and Stirchley Centre—which had formerly been managed by a Voluntary Committee with a grant from the Public Health Committee, became Municipal Centres.

The amount of work done at the Centres is outlined in the table on the opposite page.

It will be seen that 15,647 primary visits were paid to newly-born babies and 226,510 revisits were paid to these and other babies and young children. The general scheme of visiting is to pay a visit once a month until the baby is a year old, then once a quarter until the end of the second year and afterwards twice a year till the age of 5 years, when the child comes under the supervision of the Education Committee and the School Medical Officer.

The primary visits paid to expectant mothers numbered 2,627 and the revisits to 3,491. As many as 4,346 individual women attended the ante-natal clinics.

There were 12,208 new babies brought to the Centres and the total attendances of young babies and " toddlers " amounted to no less than 129,000.

MATERNITY AND CHILD WELFARE CENTRES—YEAR 1925.

	Aston St.	Berkeley Rd., Hay Mills.	Bloomsbury St.	Bristol Road South, Northfield.*	Carnegie Institute.	Harborne Lane, Selly Oak.	Hope St.	Irving St.	Lansdowne St., Winson Green.	Lichfield Rd.	St. Vincent St.	Short Heath Rd., Erdington.	Smith St.	Stratford Rd.	Trinity Rd.	Warwick Rd., Greet.	Washwood Heath Rd.	Wright St.	Floodgate St.	Stirchley and Cotteridge.	Handsworth.	Harborne.	Total.
Infants and Children :—																							
Births (and stillbirths) reported	813	391	1203	174	973	334	928	674	942	1057	851	442	1031	1032	629	471	871	979	705	303	576	207	15586
Primary visits ...	755	407	1033	165	938	405	952	672	991	1120	886	367	1093	1131	629	439	879	1073	607	352	550	203	15647
Re-visits (infants and children)	11335	4989	14812	2417	15527	5135	13189	9785	12598	17020	16082	4165	16779	17142	4902	4786	13168	15030	7387	5236	10539	4487	226510
Total visits & re-visits	12090	5396	15845	2582	16465	5540	14141	10457	13589	18140	16968	4532	17872	18273	5531	5225	14047	16103	7994	5588	11089	4690	242157
Mothers :—																							
Primary visits ...	165	48	103	33	76	138	249	90	277	76	87	85	62	246	96	130	142	91	129	31	209	64	2627
Re-visits	249	64	128	57	102	103	181	107	290	150	201	83	82	195	98	134	142	216	381	30	372	126	3491
Total visits & re-visits	414	112	231	90	178	241	430	197	567	226	288	168	144	441	194	264	284	307	510	61	581	190	6118
Children's Consultations :																							
Number held	144	97	146	48	195	51	196	98	192	194	172	96	194	195	98	98	195	98	98	50	96	97	2848
Fresh children attend'g	587	305	678	92	1084	238	656	583	604	1072	620	461	884	853	495	467	752	544	481	175	393	184	12208
Total attendances ...	7217	3572	5755	964	11099	2287	6192	5064	7662	11627	7227	4221	9179	7998	3864	4349	8282	5403	5101	2112	6604	3223	129002
Number seen by Doctor	3403	2379	2925	888	5293	1386	3808	2633	4332	4905	3898	2143	4309	3880	2496	2394	4301	2908	1473	1243	1459	1721	64177
Mothers' Consultations :																							
Number held	48	25	48	11	135	22	48	10	50	49	47	50	100	48	51	48	88	50	48	14	21	23	1034
Fresh mothers attend'g																							
Ante-Natal ...	185	72	357	27	614	85	194	48	174	455	133	132	499	251	111	159	236	242	229	52	44	47	4346
Post-Natal ...	35	5	21	11	43	5	27	7	59	105	58	44	81	32	41	24	110	65	21	7	17	11	829
Total attendances ...	521	182	699	89	1649	308	479	112	475	811	427	474	1015	544	367	552	805	579	645	143	95	164	11135
Attendance at :—																							
Sewing classes ...	747	1016	630	334	515	106	472	533	530	590	499	318	483	24	719	812	370	618	908	326	668	310	11528
Cookery classes ...	—	—	—	278	958	78	—	—	65	—	60	—	351	393	—	259	85	—	—	—	—	—	2527
Health Talks	3499	1577	1034	533	5970	446	1233	1119	4302	1538	830	1864	1672	1763	599	2017	961	1481	2158	2244	1239	78	38157

REPORT ON THE CARNEGIE INFANT WELFARE INSTITUTE.

By Dr. Ethel Cassie.

The work at the Carnegie Institute has proceeded on much the same lines as in the previous year. The attendances have been maintained at a high level, reaching a total of 27,556 during the year, and much appreciation has been shown by the mothers. There have been no changes in the Staff, and their work remains at a consistently high level.

The course of training for newly-appointed members of the staff of Infant Visitors has been continued and has proved most useful.

The Voluntary Committee and the Mothers Committee continue to be of the greatest assistance to the Staff. Their help is most valuable.

The Infant Consultations numbered 195, with an attendance of 11,099, giving an average attendance of 56 per session.

The Mothers Consultations numbered 135. The attendances were 1,536 for ante-natal cases, and 113 for post natal cases, giving an average attendance of 11 ante-natal cases per consultation.

Ante-natal Clinics.

The work done at these clinics may be set out in tabular form as follows:—

Number of Clinics	135		
Total ante-natal attendances	1536	Total attendances	1649
Total post natal attendances	113		
Fresh Mothers—Ante-natal	614		
Post natal	43		
Average attendance per clinic	12.2		
Highest attendance at any single clinic	22.0		
Ante-natal cases attending re admission to Heathfield Road Maternity Home			305
Accepted	291		
Rejected	14	(1 case transferred to Worcester Municipal Maternity Home).	

Those not accepted were rejected for the following reasons:—

1 on account of tumour complicating pregnancy.
6 ,, ,, ,, contracted pelvis.
2 ,, ,, ,, contracted pelvis and heart disease.
3 ,, ,, ,, heart disease.
1 ,, ,, ,, albuminuria (severe).
1 ,, ,, ,, patient refusing to accept advice re her ante-natal condition.

Cases sent by doctors to clinics	8	
Cases sent by midwives to clinics ...	54	
Cases sent to Maternity Hospital ...	20	
,, ,, ,, Dudley Road Hospital ...	42	
,, ,, ,, Selly Oak Hospital ...	2	
,, ,, ,, Women's Hospital ...	18	
,, ,, ,, Consultant privately ...	1	
Cases referred to Eye Hospital	16	
,, ,, ,, Queen's Hospital		
(Eye Dept.) ...	1	
(Other Departments)	2	
,, ,, ,, General Hospital		
(Skin Dept.) ...	2	
(Other Departments)	1	
,, ,, ,, Special Clinic	14	—(2 positive W.R.) (9 negative W.R.) (3 failed to attend)

In about two-thirds of the ante-natal cases it has been possible to follow the patients up and keep records of the confinements. This has been done in all cases going to Heathfield Road Maternity Home.

Conditions Found at Ante-Natal Clinics.

Contracted Pelvis of all degrees	85—small round, 47; flat, 37.
Asymmetrical contraction with scoliosis ...	1
Ext. conjugate below 7	15—small round, 9; flat, 6.
Ext. conjugate 7 to 7¼ inclusive	52—small round, 33; flat, 19.
Pelves round in type though not contracted,	25
Pelves flat in type though not contracted ...	31
(Two of these flat pelves were associated with kyphosis).	
Justo Major pelves	101

N.B.—It is not only at the Carnegie Institute that these large pelvic measurements are being noted in increasing numbers, and it is a question whether they are associated in any way with the more hygienic dress and conditions of life of the modern girls—more athletics and less tight lacing. There were not the same proportion of large pelves in the Maternity Hospital 10 years ago, and the number appears to be constantly increasing.

Cardiac Complications. 38 cases.

Mitral Regurgitation	22	
Mitral Regurgitation and stenosis	2	
Mitral and aortic disease	1	(induction of abortion).
Aortic disease	7	
Myocarditis	4	
Myocarditis with double mitral	1	
Extra systoles	1	

Diseases of the Lungs.

Bronchitis	16
Bronchitis and asthma	2
Syphilitic bronchitis	1
Tuberculosis (active)	1
Old non-active tuberculosis	3

Toxæmias of Pregancy.

Excessive vomiting	3	
Albuminuria	29	
Oedema without albuminuria	7	(not including oedema due to Varicose Veins).
Threatened eclampsia	1	
Eclampsia	1	(Albuminuria yielded to treatment but Eclampsia developed after admission to Maternity Home).

Repeated unexplained abortions	1	(see also " Accidental Hæmorrhage).
Tumours complicating pregnancy	2	
Threatened abortions	4	
Complete abortions	3	(including 1 twin abortion—in one of these cases the patient was deaf and dumb).

Unexplained ante-partum hæmorrhage	2	
Accidental hæmorrhage at 7 months	1	
Lateral Placenta Prævia	1	
Cystitis	3	
Diabetes	2	
Old Epilepsy	1	
Syphilis	2	
Psoriasis	1	
Molluscum contagiosum	1	
Inguinal hernia in pregnancy	3	
Ventral hernia in pregnancy	1	
Sebaceous cyst of vulva	1	
Lipoma in groin	1	
Supernumerary nipple	1	
Known to have had twins	7	
Miscarriage of twins	1	
Varicose veins	78	
Varicose ulcers	2	
Constipation	205	
Carious teeth	109	
Epulis of jaw	1	
Pharyngitis	1	
Blepharitis	3	(including 1 of specific origin).

Attending re sterility, relative or absolute	6
Attending to enquire whether pregnant	40

One patient developed ante-natal mania and was sent to Hospital where induction was done; there were no preliminary symptoms.

Conditions Found in Post Natal Cases.

Retroversion	8
Retroversion and prolapse	1
Prolapse	6
Prolapse with cervicitis	1
Erosion of cervix	1
Cystocele and rectocele (without further complications)	1
Salpingitis	1
Old ruptured perineum	1
Labial cyst	2
Inguinal hernia	1
Metritis	1
Persistent loss after abortion	1
Persistent loss after normal labour	1
Boil near vulva	1
Mastitis	4
Dysmenorrhœa	2
Hæmorrhoids	2
Varicose veins	1
Ruptured ovarian cyst	1

EDUCATIONAL CLASSES.

1. HEALTH TALKS.—Whenever possible two or more health talks were given at each Infant Consultation. During the year 404 were given, with 5,970 attendances. A syllabus of health talks for the year has been prepared, and this is followed as closely as possible. The pupil infant-visitors, after receiving instruction, take their turns in giving these talks.

Individual teaching has been given to every mother who does not require or wish to see the doctor. It has not been possible with the available staff to give more than four or five minutes to each woman. Special efforts are made to give instruction where there is gross mismanagement, and in the case of the "nervous child." Much appreciation has been expressed by the women for all the teaching they have received. About one-fifth of the women absorb this teaching well, and can teach others in their turn; about two-fifths will carry out instructions well and carefully, and the remaining two-fifths are very difficult to teach.

2. MOTHERCRAFT CLASSES.—These are special classes for a group of intelligent women who attend regularly for more advanced teaching. Thirty-eight mothercraft classes were held, and there were 568 attendances. The members attending these classes entered for the Rhondda Shield Competition, 1925, and one of them won it for the Centre. The subject of the essay required was, "What can a Mother do before birth, and up to one year of age to ensure her child having good teeth."

3. SEWING CLASSES.—These classes are held every Tuesday, and are well attended. Forty-five were held during the year, with 515 attendances.

4. COOKERY CLASSES.—These are held every Thursday and are very popular and helpful. There was an attendance of 958 at the 41 classes held.

5. SPECIAL LECTURES.—These have been arranged for the first Monday in every month at 7.30 p.m., and are open to both mothers and fathers. The attendance has varied from 30 to 80. The subjects have been concerned with health matters or with the activities of special municipal departments. Among the speakers this year were Principal Grant Robertson, Sir John Robertson, and Emeritus Professor Muirhead.

6. A HEALTH EXHIBITION was held in Baby Week this year for three afternoons from 2—5 p.m. A prize was offered for the best essay on "What I have learnt from the Exhibition," and was won by a father with an excellent paper. Mothers attending the Centre did almost all the demonstrating after having been specially coached. About 800 attendances were recorded. The following is a list of the stalls:

1. A Clean Milk Stall.
2. A Toddler's Diet Stall.
3. Cookery Exhibit.
4. Sewing Exhibit.
5. A Model Nursery.
6. A Contrivance Nursery.
7. A Fathers' Stall (Toys, etc., made by fathers).
8. "Things we are out to Prevent" (Rickets, Tuberculosis, etc.).

THE DENTAL CLINICS.

The demand for dental treatment is increasing. It was found necessary to increase the number of clinics in order to deal with the long waiting list. 173 clinics, with 3,092 attendances, were held during the year.

THE X-RAY CLINICS.

A weekly clinic is held for the purpose of taking radiographs of cases of rickets, of abnormalities requiring diagnosis, and of ante-natal cases. The use of radiographs in conjunction with light treatment will be referred to later. There were 43 X-Ray clinics, with 662 attendances.

THE LIGHT CLINIC.

A K.B.B. mercury vapour lamp for ultra-violet radiation treatment was installed at the beginning of the year, and treatment commenced. It was found, however, that the room was not suitable, and different arrangements had to be made. The new room has proved quite satisfactory. In it are fixed a large and small lamp. These have been in constant use since September. No light treatment clinics could be held during July and August owing to the alterations. The total number of clinics was 96, with 2,224 attendances.

The following table shows the conditions treated:—

Condition.	No. of cases.	Attendances.		
		Over 12.	12—6.	Less than 6.
Rickets	102	47	33	22
General debility	83	27	19	37
Chronic Bronchitis	12	—	6	6
Catarrhal cases	4	1	1	2
Other conditions	4	2	—	2
Totals	205	77	59	69

It will be seen from this table that there is considerable difficulty in securing regular and prolonged attendance. In rickets, where results are early and striking, the more sensible mothers come up well, and this is also the case with some of the cases of general debility where, moreover, prolonged treatment is not always required, but even in these cases the more careless mothers soon lose interest, and in some cases illness or other home difficulties intervene. The results obtained with rickets have been very good—the first result is an increase in cheerfulness, a better appetite, and an improvement in sleep, and it is this effect which appeals most powerfully to the mother of the child with acute rickets. In every case an X-Ray photograph is taken of the wrist, and a second is taken after 12 treatments; this being repeated till the bones are reported normal in the radiograph, if regular attendance can be secured. The change in the bones is early and impressive, but even after an X-Ray report to the effect that the bone is normal, the clinical signs of rickets remain, viz., the beading of the ribs, the enlarged epiphyses, and the open fontanelle, in addition, of course, to the more permanent deformities of the long bones. The muscles too remain flabby, and lacking in tone long after bone repair has taken place, while the anæmia is also very persistent in some cases. The teeth on the other hand erupt early. The best single indication for the cessation of treatment lies in the recovery of muscle tone. When this has improved materially, the child is sent to the remedial exercise clinic so as to assist the improvement of deformities.

The cases of " general debility " include children suffering from the after effects of acute illness, such as pneumonia, and many cases of what is probably incipient rickets, the symptoms not being sufficiently definite to enable a diagnosis to be made. These two groups do well, and often improve rapidly. Where the " general debility " is due, however, to mismanagement and lack of control, unless the mother can be induced to alter the home conditions no good results, and these cases are among the worst attenders. In some cases, however, with the mother's co-operation, striking results have been obtained. There has not yet been time to speak definitely as to the value of the ultra-violet light treatment in the treatment of the typical " catarrhal " child, or in cases commonly labelled " marasmus." The impression gained is that the former benefits slowly, but undoubtedly, while the latter benefits if there is associated rickets, or the debility following an acute infection.

THE MASSAGE AND REMEDIAL EXERCISE CLINIC.

Fifty of these clinics have been held with 559 attendances, and 141 cases have been treated. The aim of the clinic is to deal with minor orthopædic defects, bad posture, constipation, and general poor muscular development. The mothers are shown a series of simple exercises which are to be done daily in the home, and at the clinic itself massage and special exercises are carried out. The results obtained have been very good. Many of the mothers are most interested, and report an active interest on the part of the fathers. The Clinic has a very definite educational value, in increasing the knowledge that minor defects cause disability later in life, and the scope of the work should be increased from this point of view alone.

The results as regards posture and constipation have been striking, but in the rickets cases also the effect is most beneficial. The cases treated included the following:—

Bow legs	24
Bad posture	8
Kyphosis	3
General poor muscular development	41
Knock-knees	25
Respiratory defects	6
Constipation	16
Flat feet	5
Club foot	3
Other conditions	10
Total	141

THE BREAST-FEEDING CLINIC.

This Clinic was established in 1924, and has gradually grown into a regular part of the work of the Centre.

During the calendar year 1925, there were 253 women sent to the Clinic for investigation, because there existed a doubt either on the part of the mother or on the part of the doctor as to the sufficiency of the breast milk for the child.

Each mother is asked to attend between 9.45 a.m. and 4.45 p.m., and during this time she is asked to breast-feed her baby from one of the breasts three times, having been previously instructed not to feed after 7 a.m. on the day of the test.

Before and after each feed the baby is carefully weighed to within half a drachm.

Any milk which is left in the breast is then expressed to indicate whether the infant is getting all that is available.

Of the 253 mothers, it was found that in 50 of them the amount of breast milk was sufficient. In 7 cases the breast yielded less than half a fluid ounce.

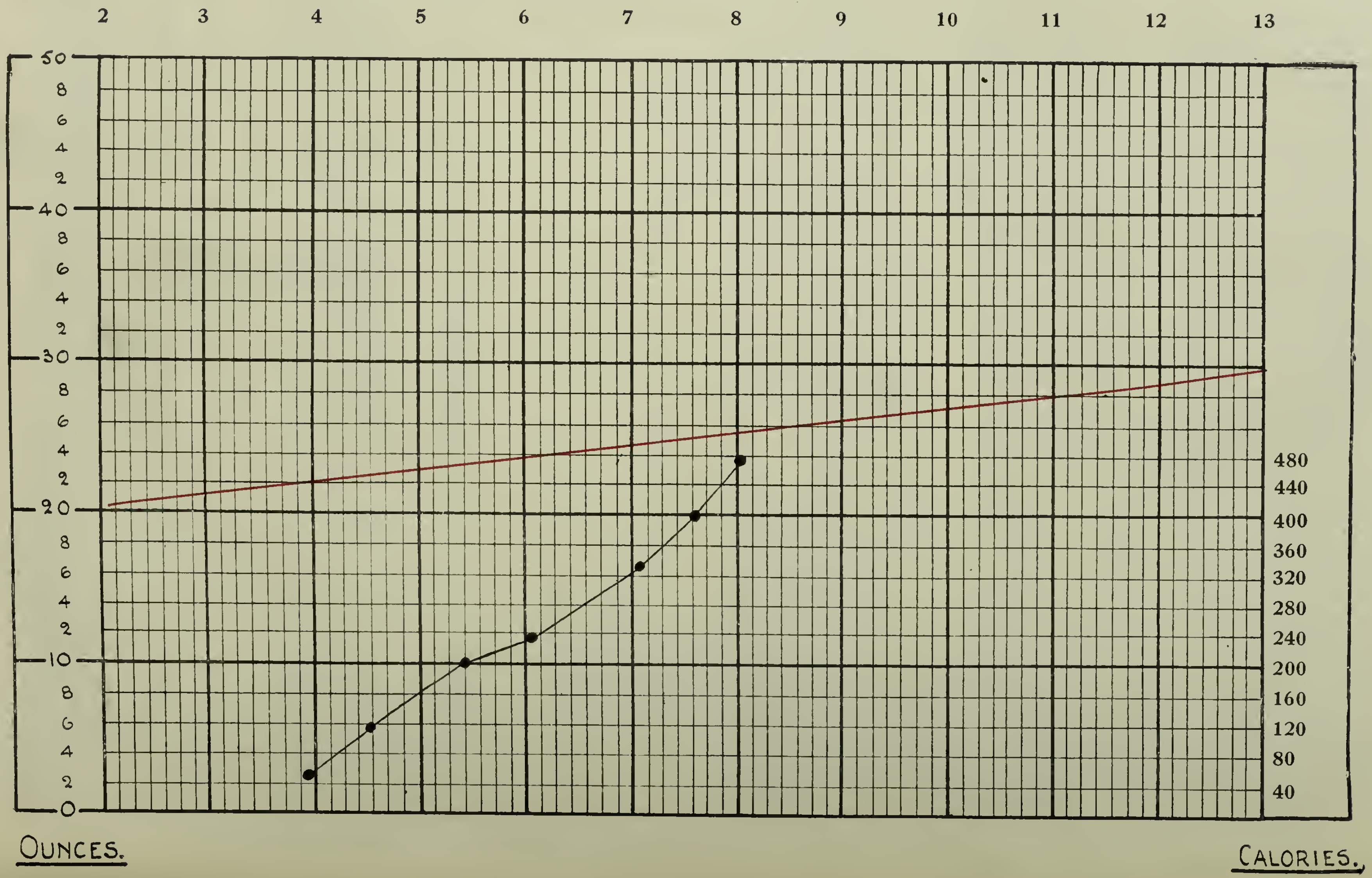
In 196 cases the infant was obtaining quite insufficient amounts of milk.

It is assumed that one ounce of breast milk is of a caloric value of approximately 20 calories and that an infant under six months of age requires approximately 50 calories per lb. On this basis a chart for use at the clinic has been constructed. This shows at a glance the age of the child, its caloric requirements, and the amount found by the test feeds,

TEST FEEDING CLINIC.

NAME, BABY——————

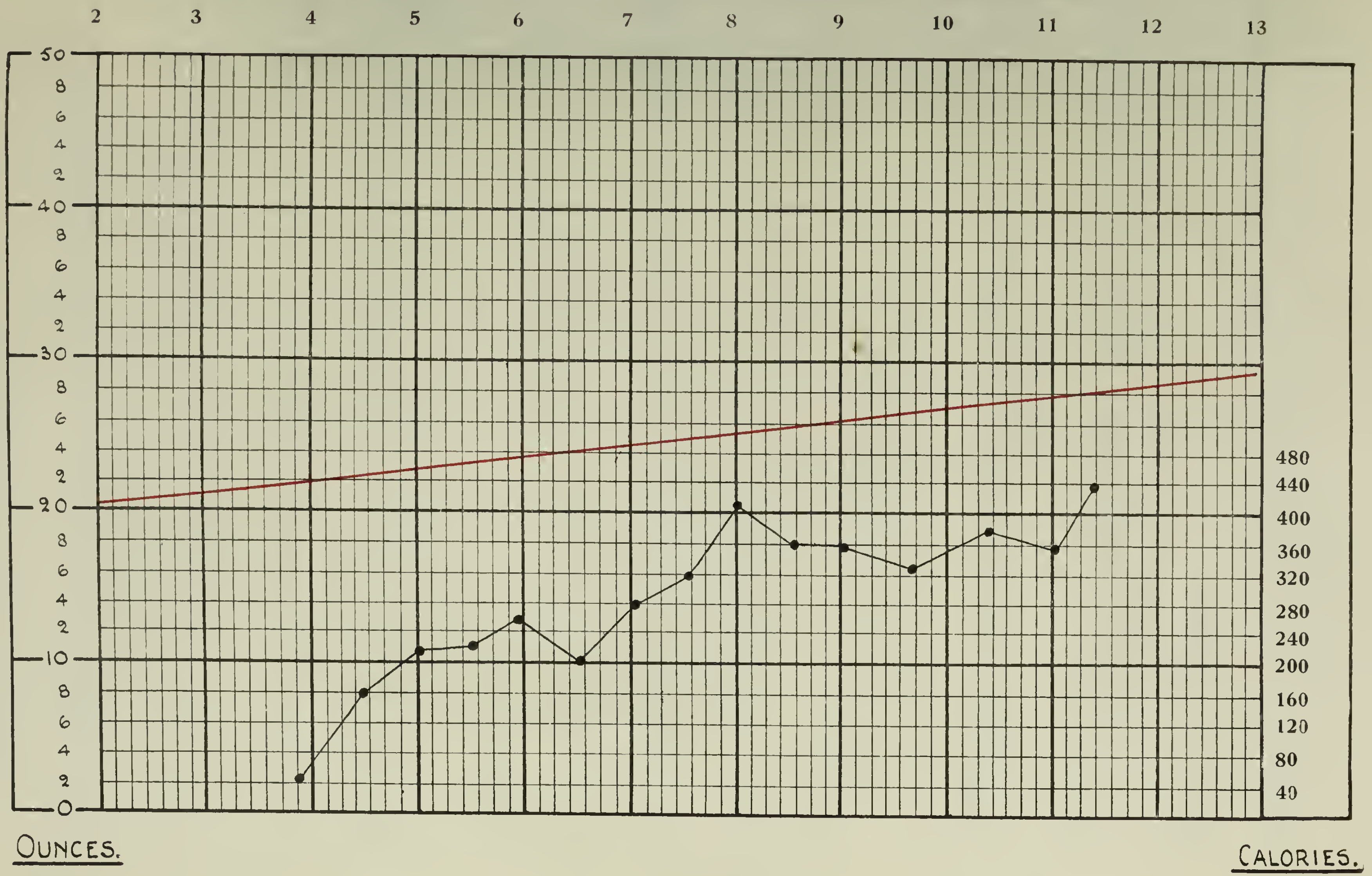
AGE 4 WEEKS. (This Baby was entirely Breast Fed).



TEST FEEDING CLINIC.

NAME. BABY ——————

AGE 4 WEEKS. (Nipple Shield used until first attendance at Clinic; then discontinued).



In 17 cases there was complete restoration of breast milk.

In 80 cases the restoration was nearly complete, but in these cases one or two supplementary feeds were advised.

In 18 cases no improvement resulted in the amount of breast milk from the treatment advised.

In 18 cases the amount of breast milk actually diminished in amount. Fifteen of these were babies suffering from some definite illness. In one case the mother was ill, and in the remaining two cases no definite cause could be found.

In 8 cases the infant was taken into the ward for treatment.

In 55 cases the mother attended on one day only. Of these 17 cases were of children six months old, who were sent for regulation of supplementary feeds. Thirty-eight mothers failed to return, of whom 20 came from long distances.

TIME REQUIRED.

In 7 cases where less than two ounces of milk was secreted, complete restoration was attained in an average of 25 days. In 10 cases, with less than 3 ounces secreted in 24 hours complete restoration was reached in 18 days.

DEGREE OF IMPROVEMENT IN 80 CASES.

The amount of milk increased by one-third in 33 cases.

The amount of milk increased by one-half in 29 cases.

The amount of milk doubled in 18 cases.

REASONS FOR INSUFFICIENT BREAST MILK.

Sick and feeble infants	66
Badly managed infants	46
Debilitated mothers	18
Nervous and over-anxious mothers	18
No apparent reason	55

This breast-feeding clinic is the only one in the City. The doctors in charge of the various Maternity and Child Welfare Centres are instructed to send cases to this Clinic for investigation, and as a result of the work done at the Clinic a report is sent to the doctor on the effect produced.

Where necessary, samples of milk are sent for chemical analysis.

A record sheet is kept at the Centre under the following headings:—

Name ....Breast milk required in 24 hours ....

Supplementary Food ....

Date.	Time.	R. or L. Breast.	Weight before.	Weight after.	Amount		Supp. with	Amount of breast milk in 24 hours.
					Taken	Expressed.		

METHODS ADVISED.

At each breast-feeding clinic mothers are advised as to—

(1). MANAGEMENT OF NURSING.

(a) *Method of holding baby.*—Mother and child *must* be comfortable. Mother is seated in a low straight-backed chair, leaning slightly forward, so that the nipple falls easily into the child's mouth.

(b) *Supporting breast and controlling flow.*—With the free hand the mother is taught to support the breast and control the flow of milk if necessary with the fingers on the nipple.

(c) *Care of nipple.*—Cleanse and dry after each feed and avoid use of nipple shield.

(d) *Support for pendulous breasts.*—Special supporting bodices avoiding pressure on nipples are advised. (Patterns available).

(2). DIET.

Foods containing vitamines, extra fluids chiefly water.

3. HYGIENE.

Daily bath where possible. If not, towel wrung out of hot water, brisk rub to follow.

(4). HOT AND COLD DOUCHING OF BREASTS.

This consists of having two bowls, one containing water as hot as can be borne without scalding, and the other cold. Bathe alternately with hot and cold, always commencing with the cold and finishing with the hot, letting the whole process cover about five minutes.

N.B.—Use a separate sponge in each bowl.

(5). MASSAGE AND EXERCISES.

Instructions are given to each patient as to the type of massage of the chest and breast needed and as to how to deal with small or depressed nipples.

Every mother has supplied to her a copy of the following printed leaflet:—

" CARNEGIE INFANT WELFARE INSTITUTE.

" TO INCREASE THE BREAST MILK.

" 1. Faith, determination, and co-operation on the part of the mother, and active sucking on the part of the baby are essential.

" 2. Mother to have warm bath or sponge every morning, and a brisk rub with a rough towel to follow; failing this, a rub down with a towel wrung out of hot water.

" 3. Put baby to the breast every three hours in the day time.

" 4. See that the breast is thoroughly emptied each time, expressing any that remains by hand.

" 5. Stimulate the breasts by hot and cold sponging before the feeds. Take two bowls with a separate sponge in each. Bathe each breast first with the cold and then the hot, moving quickly from one to the other and dry with a rough towel, rubbing from without towards the nipple.

" 6. Massage from the shoulder to the nipple, from under the arm towards the nipple, and from the waist upwards, supporting the breast with one hand (after each feed).

" 7. Take three good meals a day, including fresh fruit and vegetables.

" 8. Take about one and a half pints of extra fluid daily, chiefly water. It is a good plan to drink a glass of water every time baby is fed.

" 9. Take some outdoor exercise every day, and sleep with the windows open at night.

" 10. If possible, take a rest every afternoon, with the feet up.

" 11. See that the bowels are regular. A glass of cold water, or a raw apple before breakfast is helpful where there is any tendency to constipation. " If an aperient is necessary, take one of the following: liquid paraffin, cascara, senna pods, liquorice powder."

THE OBSERVATION WARD.

The number of admissions to the observation ward during the year was 107.

1. MOTHERS WITH INFANTS—11 CASES.

The mothers admitted had been breast feeding their infants. Eight cases were transferred from the Breast Feeding Clinic, as cases requiring more careful observation and treatment than could be given at the clinic, the remainder were admitted at the request of the family doctor. All these cases did well, and in four instances the child left the ward entirely breast fed. The remainder required supplementary feeding or weaning.

2. CHILDREN ADMITTED—96. (11 with their mothers).

The children have been admitted in order to investigate the cause of chronic ill-health of varying degrees of severity, and the observation of the effects of varying methods of treatment has also been of considerable interest.

The conditions from which the children were suffering were as follows:—

Chronic infective enteritis	40
Dyspepsia	8
Wasting and mismanagement	24
Wasting and rickets	6
Anæmia	2
Pyelitis	2
Cœliac disease	2
Chronic vomiting	2
Eczema (chronic and severe)	2
Other conditions	8
	96

A number of investigations have been carried out since the ward was opened; some of these are still incomplete. The following brief record of observations made during 1924 and 1925 may be of interest.

1. Marasmus.

During 1924 and 1925 seventy-one children were admitted suffering from chronic marasmus, the wasting being very marked in most of the cases. They were children from two months to five years of age, but the majority were under 12 months. Careful observation was made as to the cause of the condition, and the results are tabulated below. It will be seen that cases of chronic infective enteritis predominate, and it has been found that these cases yield very slowly to ordinary dietetic and hygienic measures, while their response to a diet of lactic acid milk containing active cultures of Bacillus Bulgaricus is usually rapid and satisfactory. The chronic dyspepsias form the next large group, and here the cause is generally long continued mismanagement of the diet. These cases often yield rapidly to simple dietetic correction, unless the child is so debilitated that only a very slow response can be expected. The habitual vomiting cases give good results with concentrated and thick feeds, but the cases of pyelitis gave very unsatisfactory results, and owing to the prolonged treatment required, were usually transferred for further treatment to one of the hospitals. The cases noted as " Severe Rickets " really presented all the features of a severe toxæmia in addition to those typical of rickets, but it was not found possible to define the underlying fault. These cases showed severe secondary anæmia and acidosis, and the children were very debilitated. Of the deaths two were from broncho-pneumonia, one from meningitis, and three from syncope.

Marasmus Cases.

Condition.	No.	Good Homes.	Unsatisfactory Homes.	Recovering.	Improved.	Death.
Chronic Enteritis	29	18	11	23	2	4
Dyspepsia	23	7	16	17	5	1
Pyelitis	5	2	3	—	4	1
Cœliac Disease	2	2	—	—	2	—
Underfeeding, etc.	3	—	3	3	—	—
Habitual Vomiting	4	3	1	2	2	—
Severe Rickets	4	—	4	—	4	—
Chronic Bronchitis & mismanagement	1	—	1	—	1	—
	71	32	39	45	20	6

2. Investigations as to the Acidity of the Gastric Contents in Infants under 12 Months of Age.

It has recently been suggested that much of the difficulty in artificial feeding in infants is due to the larger amount of acid secretion required for cows' milk as compared with human milk. Cows' milk contains a higher percentage of phosphates, calcium caseinate, etc. In order, then, to obtain the same degree of acidity, more hydrochloric acid is needed.

In view of the stress laid on this point, it was felt necessary to ascertain if possible how the average infant responded to the intake of varying types of artificial food, as far as the secretion of hydrochloric acid was concerned. 184 investigations have been carried out in healthy, marasmic and other infants. The results obtained have shown that except in acute illness, the infant is able to secrete enough acid for its requirements, taking the results obtained with breast milk in healthy infants as the standard, and that the type of food makes very little material difference. Free HCL is never found unless the test feed is much below the calorie value required by the child; it can be obtained, for instance, with barley water or very diluted small feeds, but never with an ordinary diet. The hydrogen ion concentration (PH) corresponds fairly closely to that given by breast milk with any milk mixture ordinarily used, i.e., the amount of acidity of the gastric contents is similar. These results appear to show that as far as gastric digestion is concerned acid milk mixtures are of doubtful utility. The Hydrogen ion concentration with some of the ordinary mixtures is given below.

Food.	PH	No. of investigations.
Cows Milk and Water	4.8	13
Whole Milk (Cows)	4.9	11
Condensed Milk	4.8	9
Dried Milk	4.9	8
Breast Milk	4.8	4

The method employed was as follows:—

The stomach contents were examined one hour after giving the feed, and the amount noted. This was filtered and the PH estimated colorimetrically. Each feed represented one-sixth of the caloric requirements of the individual infant. In a large number of cases the HCL deficit, and the total and combined acidity were estimated by titration against $\frac{N}{10}$ NaOH, using in the first case Congo Red, and in the second Phenolphthalin as indicators. The former method was used in 77 cases, and the latter in 107 cases.

3. The Administration of Lactic Acid Milk (Cultures of Bacillus Bulgaricus) in Chronic Enteritis.

The use of this milk has proved very valuable, excellent results have been obtained in cases of chronic enteritis. The change in the naked eye character of the stools is an early and marked feature, and examination of films stained by Gram's method shows a definite change in the intestinal flora, the change being to a higher percentage of Gram negative organisms. Ten cases were studied in detail. The cultures were obtained from the City Laboratory, and the method of preparation of the milk was as follows:—

The milk (whole or skim) is sterilised in litre flasks, inoculated, and then incubated for 8 hours. The curd is broken up with a fork and then passed through a sieve. It is given in suitable dilutions or as whole milk.

4. THE MICROSCOPICAL AND CHEMICAL EXAMINATION OF STOOLS OF YOUNG CHILDREN.

Chemical examinations have been made with the object of ascertaining the reaction, and the presence or absence of occult blood, while the microscopic examination has included Gram stained films for the bacterial flora, and examinations for pus, fat, etc.

The stools have been examined in the following cases:—

1.—Sub-acute, and chronic enteritis.
2. Convalescence from enteritis.
3. No intestinal disorder with normal stools.
4. Constipation.
5. Breast fed infants.

The results of the examinations carried out in 1925 were as follows:—

(A). THE CHEMICAL EXAMINATION.

In the cases suffering from *enteritis*, 54% of the stools were acid, including all the more acute cases. Blood was found in 83% of the cases. Pus and epithelial cells were frequently found, on the microscopical examination of the wet preparation. As the patients improved, the stools became alkaline, only 22% remaining or becoming acid. Blood was still found in 50% of the cases who had clinically quite recovered. Where the stools were *normal*, 90% were alkaline, and blood was found in 20%, although the patient showed no sign of gastro-intestinal disorder. Most of these cases, however, had a history of previous intestinal disorder. Constipated stools were always found to be alkaline, and blood was present in 33% of the cases. All the breast fed infants whose stools were examined were suffering from enteritis, consequently all the stools were acid, and 80% contained blood.

The high percentage of stools containing blood in the sub-acute and chronic intestinal disorders of infancy is a fact which has not apparently attracted the attention it deserves. The test used was the benzidine test which is, of course, a very delicate one. The persistence of a positive reaction after convalescence and even recovery are established is also a point of some interest.

(B). THE BACTERIOLOGICAL EXAMINATION.

It has been found impossible to ascertain the causal agent of bowel irritation from the examination of the Gram film. The films show a very mixed flora which may exhibit a preponderance of Gram negative or Gram positive organisms. In many cases of enteritis, particularly the acute cases, the Gram film shows a large number of Gram positive cocci (staphylococci, and more rarely, streptococci) and with recovery the film tends to become more Gram negative. This may have some significance. There is no such thing as a "*normal*" Gram film. Cocci, however, are rarely a prominent feature. The Gram films in the breast-fed showed almost in every instance a uniform picture of slender Gram positive rods, which may be taken as the normal flora of the breast-fed infant's stool.

In cases of enteritis treated with lactic acid milk (culture) the change in the flora was an interesting feature.

The following are the tabulated figures:—

	No.	Alk.	Acid.	Neutral.	Blood.
Enteritic stools	46	44%	54%	2%	83%
Convalescent stools	31	68%	22%	10%	50%
Normal stools	20	90%	10%	—	20%
Constipated stools	6	100%	—	—	33%
Breast fed stools	5	100%	—	—	80%

	No.	Mixed film.	Gram + Predominance.	Gram— Predominance.	Cocci +
Enteritic stools	46	—	28%	18%	54%
Convalescent stools	31	13%	32%	42%	13%
Normal stools	20	90%	—	—	10%
Constipated stools	6	100%	—	—	—
Breast fed stools	5	20%	80%	—	—

WITTON BABIES HOSPITAL.

(REPORT BY DR. MURIEL HARTLEY).

The work of the hospital has continued on the same lines as in previous years—the barrier system and team-work method being of great importance in preventing spread of infection and in the training of the nurses.

The Feed-Room is in charge of a special nurse with the help of two probationers. Here the feeds are prepared twice a day—as soon as possible after the delivery of the milk. The majority of the infants have six feeds a day (3 hourly from 6 a.m.—10 p.m. and no night feed): therefore three feeds are prepared for each patient at a time, in separate bottles, and all the ordinary cow's milk feeds are pasteurised. The feed-room nurses give the babies their bottles, which are held throughout the feed for the small infants.

The bath-room nurses attend to the changing, bathing, washing, etc., the former being done very frequently, keeping the babies in good condition.

The nurses work in rotation in the bath-room and feed-room, having at least a month at a time in one or the other, and 2 months on night duty.

A great deal of individual attention is given to each infant, with as much "mothering" as possible. This necessitates the number of nurses per patient being higher than is allowed in most hospitals, but is of the greatest help to the infant's progress.

Another important point is the length of time it is possible for the babies to remain in hospital—thus supplying a want, which is impossible in other institutions.

During the winter months it is not possible to get the very sick infants outside a great deal, as one of their greatest needs is for warmth, but the older ones are out on the balcony whenever the weather permits, and during the warm weather the majority are outside a great part of the time.

In very cold weather, with high winds, it is sometimes difficult during the night, to keep up the temperature of the ward, but the covering of the floor with linoleum has greatly helped.

Last summer the fly nuisance was again extreme, but fortunately there was not a single case of acute infective diarrhœa or spread of infection.

The feed-room and bath-room had previously been fly-proofed. The cots were covered with mosquito netting.

During the year, there have been in the ward several toddlers, who were too big and active to be confined entirely to cot or playground. The presence of these is enjoyed by the staff, but they should be in a ward apart from the infants, as there is a great risk of their breaking down the barrier system of nursing, and thus spreading infection.

During the year, there have been 126 admissions. Of the number discharged, 92 were much improved, 21 not improved, and 9 died.

The large number not improved, was due to the fact that the ward had to be closed for disinfection and several had to be discharged sooner than they otherwise would have been. Two very suspicious cases of whooping cough were admitted and discharged the next day, and five babies were transferred to other hospitals, as needing surgical treatment.

The mother of a premature baby was also admitted as a special case for test-feeds and the restoration of Breast Feeding. For the first 8 days complementary bottle feeds were given, when necessary: after this, breast milk became sufficient, and the infant put on weight throughout her three weeks stay in hospital.

Accommodation and facilities for more of these cases would be of great value, especially if any superfluous breast milk could be used for any special cases.

Of the infants who only made slow progress, many were found to be suffering from other complaints:—otitis media (more or less severe) was common, pyelitis, bronchitis, nasal catarrh, etc.

In many instances mild attacks of diarrhœa were found to be associated with some other infection (as above), pointing to a general rather than a purely gastro-intestinal cause.

From the history of the cases admitted, the chief factors in the causation of marasmus and rickets, appear to be:—

1. Poor health, hygiene and inadequate diet of the mother during pregnancy and lactation.
2. Errors in feeding in early infancy.
3. Overcrowding in poor houses.

1. A fair number of the mothers had a history of some definite disease, such as tuberculosis, rheumatism, heart disease, and albuminuria, while a great many had suffered from ill-health and vomiting throughout most of the pregnancy.

Some of the babies were said to have been small and feeble at birth, others were of average weight and appeared healthy, but sooner or later failed to thrive, and frequently suffered from some catarrhal complaint such as diarrhœa or bronchitis, or broncho-pneumonia. This can probably be accounted for by errors and omissions in the mother's diet during pregnancy and lactation—either through poverty and ignorance or through indigestion and vomiting, with resulting insufficiency of food—the chief deficiency being food containing fat-soluble vitamins.

This deficiency also appears to explain the special susceptibility to infections and rickets, of twins and prematures, who obviously cannot obtain their full amount of vitamins from the mother, and the lack of maternal vitamins would account for the diminished immunity to infections among bottle fed infants.

2. Some of the worst cases admitted during the first 3 or 4 months of age had had no breast milk at all, and in most cases the breast had been given for a short time only, followed by several different foods.

3. The ill-effects of bad housing conditions were most evident in the children over one year, who nearly all suffered from rickets, anæmia and general debility.

There appears to be great need for facilities for treatment of these children from 18 months to 5 years, so that a sufficiently long stay in hospital can be given.

RICKETS.

Thirty cases with definite signs of rickets were admitted, ages between 6 months and 2 years.

Owing to the various ages and different stages of the disease on admission, it was not possible to show any definite proof of the greater prevalence of rickets in the winter months. However, there appeared to be less during the summer.

Many of the cases were treated by fresh air, suitable diet and cod liver oil, and as many cases as possible have been sent up to the Children's Hospital, for ultra-violet radiation.

They have usually attended three days a week, generally 3 or 4 going together in a taxi in charge of one or more nurses.

The Lamp used is the K.B.B. Atmospheric Type, 220 volts, Mercury Vapour Lamp.

The progress was noted by means of a Radiographic examination at the beginning of and every month during treatment. The general beneficial effect was well marked in practically all the cases—in some, however, the weight during the first week or two of treatment, remained stationary, although the child appeared in better health.

The demand for beds for more acute cases of wasting, and in some instances, the inability of the parents to continue payment, made it impossible to keep all the children in long enough to show complete healing of the rachitic bones: the mother was then instructed to continue the treatment as an out-patient at the Hospital. It is very distressing to be obliged to send them out before really fit, to those conditions which have caused the trouble—overcrowded home (often one room) and poverty.

PREMATURE INFANTS.

Nine cases admitted.

There is special anxiety attached to the treatment of Prematures in a big ward, owing to their susceptibility to infection, but all who had a chance of survival, made satisfactory progress. Of these, 4 were under 1 month on admission, and they remained in hospital 118, 68, 31, 21 days respectively; another was 2 months old, and was in 44 days. Four died (see deaths).

PYLORO-SPASM.

The usual history in about 12 cases was as follows:—Apparently normal at birth, and breast fed for 2, 3 or 4 weeks. Then different foods were tried—the infant did moderately well at first, then vomiting occurred, with loss of weight and other symptoms.

The vomiting occurred after most feeds, in many cases being severe. In some, constipation was present, but more usually, diarrhœa. There was a good deal of pain and crying. The ages varied from 5 weeks to 4 months, and the weight about the same or less than at birth. Feeble peristaltic waves were often visible.

Under treatment the vomiting became less, in some cases ceasing entirely, others having one or two small vomits during the day occasionally.

Gastric lavage was found beneficial in some cases and belladonna also has given good results.

A cow's milk mixture was usually given at first. Some did well—others failed to gain weight, even if vomiting was much diminished. The loose stools were apt to continue. In one case, the addition of decinormal hydrochloric acid, and in others lactic acid, has produced immediate improvement—less vomiting, normal stools, and gain in weight. The HCL was not used under 3 months, but the lactified milk has been given to very young infants.

Dried milk, a patent food, and condensed milk have respectively given good results after failing with cow's milk. If giving a dried milk, the diet is not altered prior to leaving hospital; otherwise cow's milk is gradually substituted; as a rule with little difficulty if the symptoms are cured. Sweetened condensed milk appears to give the greatest trouble in this respect.

Some of these had developed into cases of *habit vomiting*, and in about half-a-dozen cases, good results were obtained by feeding thick cereal. One very striking case of habit vomiting was apparently aided at the onset by putting the fingers into the mouth and was associated with rumination. Gastric lavage and several feeds were tried with no effect, the arms were splinted, still vomiting continued. The weight remained practically stationary for many weeks. Thick cereal food was then given with dramatic results—the weight shot up, increasing 7½-lbs in 9 weeks, on discharge, being practically normal. The vomiting almost entirely ceased, but there was still a tendency for the child to attempt to induce it if not watched.

PYLORIC STENOSIS.

All cases diagnosed as pyloric stenosis were transferred to the Children's Hospital, some being returned 2—3 weeks after operation for further convalescence. Some cases sent proved to be spasm (severe cases). It is interesting to note that most of these appear never to have been breast fed.

MARASMUS.

A common history is as follows:—Many of the youngest patients (and amongst these appeared to be the worst type) had never been breast fed, others had had breast for a short period and then partial or entire artificial feeds. A history of failure to thrive, with stationary or falling weight, either constipation or diarrhœa, or these conditions alternating, vomiting in many—one or more previous catarrhal illnesses. Many had been in other hospitals for wasting, gastro-enteritis, bronchitis, pneumonia; and whooping cough was a fairly common previous illness.

Some were transferred directly from the Carnegie Institute and other hospitals—a few convalescent after operations for pyloric stenosis or intussusception. Many had been under treatment as out-patients for diarrhœa.

Some of the cases begin to do well almost immediately, and for them a prolonged stay is not usually necessary. Others, however, although they may distinctly improve in general condition soon after admission (become more active, brighter, less fretful and have normal stools), do not put on weight.

As a general rule, if there is no other indication than stationary weight for change, the diet is not altered, and when this so-called "period of repair" is over, there is frequently a sudden and unexplained gain, which is then fairly constantly maintained. This happens in quite a number fed on a simple cow's milk mixture, cow's milk being the food used in the large majority of cases.

If a baby is on a dried milk on admission, especially if from a dirty home, with little prospect of getting clean fresh milk later, it is left on the same food, with suitable modifications. The sterility and ease of preparation of dried milk appears to be the chief recommendation, although in a few cases where cow's milk was not giving satisfactory results, the substitution of a dried milk almost immediately produced improvement. This can also be said of a few cases when condensed milk was tried. This appears to have been more easily tolerated—after a few weeks the diet was again gradually changed to fresh or dried cow's milk.

Better results are obtained from half cream than full cream dried milk.

Almata has been used in a few selected cases, where there was a possibility of cow's milk anaphylaxis, and on the whole good progress was the result. In a recent, severe, obstinate case of seborrhœic eczema, there was rapid improvement when the diet was changed from cow's milk to almata.

The high buffer value of cow's milk has been reduced by the addition of decinormal hydrochloric acid ʒii of $\frac{N}{10}$ HCL, with ʒii water, to every ounce of milk), and in several cases excellent results obtained.

More recently streptococcus lacticus has been in use (the Toronto Culture obtained by Dr. Parsons). Fresh supplies when necessary are obtained from the Children's Hospital. The method used is to save enough each day as culture for the following day's milk. After subculturing in this way for 3 months, a specimen was examined and found free from contamination.

Many infants have been given this lactified milk and have done extremely well. It has proved very useful in cases with loose stools—in severe cases being skimmed before lactifying. The addition of casec has also been useful in many cases—as the diarrhœa subsides, sugar or dextri-maltose being substituted for the casec. The infants usually take the lactified milk quite well, sometimes the addition of saccharine being necessary in the absence of sugar.

Lactalbumen is now being made at the Children's Hospital, and some has very kindly been given to us—so far with very good results.

The caloric value of the infant's food is worked out, and it has been found that in marasmic infants high caloric feeding is necessary to obtain a gain in weight (60—70 cal. per lb. per day on an average). Many infants at the onset of the treatment cannot take this amount—either through lack of appetite, or the presence of vomiting or diarrhœa.

Special investigations on the absorption and utilisation of food in marasmic infants are being carried out in the Biochemical Department of the Children's Hospital by Dr. Parsons and Miss Hickmans, 56 of the cases being from the Babies Hospital.

The infant is kept on the same diet for at least 3 days before and during the period of collections of stools and urine. Extra food is prepared and half an ounce saved from each feed. Any food left or vomited is noted. The infant is kept on the metabolism bed for five days, while all urine and stools are separately collected.

The infants chosen are at least 20 per cent. below the average weight for their age, with no diarrhœa or other disease.

Full details of the results of these investigations have been published. (Dr. Parsons, "Lancet," April 5th and 19th, and May 10th, 1924. Miss Hickmans, "Biochemical Journal," Vol. XVIII., No. 5, 1924). Further results will be published shortly.

In the absence of diarrhœa, the absorption of fat, calcium, carbohydrate and protein, was normal. Conclusions drawn are that atrophy is not a gastro-intestinal disorder, but probably a disorder of general metabolism.

NASAL DIPHTHERIA.

On May 24th, 1925, two patients had symptoms of mild nasal diphtheria, and were transferred to Little Bromwich. On the 27th 2 cases, and on June 1st 3 cases of profuse nasal catarrh with positive swabs occurred and were also sent to Little Bromwich.

Swabs were taken of every patient and member of the staff. Of the staff, 2 maids (matron's and dining room maid) and the daily washerwoman were positive. Of the patients remaining, 12 were positive and 5 negative. The ward was closed from June 16th—July 13th.

After re-opening, 2 more cases occurred and were sent to Little Bromwich on August 6th. The ward was in quaratine 14 days.

DEATHS.

1. Premature. Admitted with acute enteritis. Pneumonia. Died in 5 days.
2. Premature. Marasmus. Sudden death. Enlarged thymus (P.M.). In hospital 83 days.
3. Premature. Marasmus. Admitted with severe gastro-enteritis. In 8 days.
4. Marasmus. Congenital syphilis. Nephritis. Moribund on admission. Died in 24 hours.
5. Pyloro-spasm and enteritis. In 12 days. (P.M.=No stenosis).
6. Congenital hypertrophy of bladder, with bilateral hydronephrosis (P.M.). In 26 days.
7. Miliary tuberculosis. Bron.-pneumonia (P.M.). In 10 days.
8. Marasmus, pneumonia. In 16 days. Previous history of diarrhœa and bronchitis and unsatisfactory progress and severe bronchitis on admission.
9. Marasmus and acute pyelitis. In 65 days. Premature. Poor previous history, including pneumonia and meningitis.

MUNICIPAL MATERNITY HOME, HEATHFIELD ROAD.

This Institution has accommodation for 18 patients.

During the year 1925, there were 262 confinements, the average length of stay being 14.9 days.

Of the cases admitted 148 were primipara and 114 multipara ; in the latter cases the child was the second in 69 instances, and the third in 23 instances.

Of the 262 mothers 246 were confined by the midwives on the staff and 16 by the medical attendant of the patient.

In 46 cases medical assistance was called in either on account of the mother or the child.

In two cases puerperal sepsis was diagnosed. In both the severity of the disease was slight and complete and rapid recovery resulted. In only one instance—a case of twins was it necessary to abandon breast feeding while the patient was in the Home.

No maternal death occurred but there were 6 stillbirths and 3 cases of infants who died within 10 days—two of which were premature.

The fees charged to patients ranged from £1 1s. 0d. to £3 15s. 0d. per week.

The total cost of the Institution during the financial year ending March 31st, 1926, was £2,496 17s. 10d. The amount received in fees was £1,570 10s. 9d. The gross cost per patient per week was £4 3s. 1d. The net cost to the Corporation after deducting grant from Ministry of Health and fees received was £463 3s. 7d.

HOME HELPS.

In 1925 the Home Helps attended 292 cases, chiefly confinements, and in a few instances they looked after the homes of mothers who were sent to Pype Hayes Hall.

The majority of applicants were those who could not afford to pay an adequate sum for private help, but a large number paid 3/- or 5/- per day for the sake of getting a reliable woman, some of them having previously been dissatisfied with the help they had privately engaged.

Much appreciation of the Home Helps' work has been shown by the persons who engaged them.

PYPE HAYES HALL CONVALESCENT HOME.

This Home was opened in 1920, primarily as a Convalescent Home for Mothers who need a rest under good conditions after a difficult confinement.

It has 24 beds, and was kept well filled throughout the year, the number of mothers admitted with their babies being 357.

MATERNITY FEEDING CENTRES.

During the year there were 24,969 dinners served at the Maternity Feeding Centres.

In the early part of the year the dinners were all well attended, but towards the beginning of the summer the numbers attending St. Vincent Street and Carnegie Institute decreased to such an extent that it was thought advisable to discontinue the supply of meals, but to re-open these feeding centres if there was a demand for dinners later on. About the same time the numbers attending other dinner-centres decreased considerably and fluctuated for several months.

On making enquiries this lessened demand for dinners was found to be due, partly, to less unemployment, and also to the increased grant for the unemployed.

On the whole, the dinners have been satisfactory, of a good quality and well cooked.

The transport arrangements worked very well. The meals were always delivered promptly and reached each centre in plenty of time to allow of re-heating the food before serving it.

ATTENDANCES.

Carnegie Institute	1,768	Closed July 18th	24,969
St. Vincent Street	2,305	Closed June 20th	
Newtown Row	5,146		
Smith Street	4,838		
Hope Street	3,767		
River Street	3,613		
Bloomsbury Street ...	3,532		

COST.

	£	s.	d.
Cost of food	845	4	3
Cost of Transport	124	10	0
	969	14	3
Receipts (from Centres)	208	15	7
Total	£760	18	8

Net cost per meal = 7.3d.

MIDWIVES ACTS.

NUMBER OF MIDWIVES.

Number notifying intention to practise	255
	(" Certified 195, " Bonafide " 60)
Attached to hospitals	12
Temporarily employed only	7
Residing outside City	13
Left City in 1925	11
Given up owing to ill-health	2
Died	3
Struck off roll for misconduct	1

CASES ATTENDED BY MIDWIVES AND OTHERS.

Cases attended at home by Midwives ...	11,292	(61 per cent. of the total births and stillbirths).
Cases attended in institutions	2,654	
Cases attended at home by doctors and nurses or Handywomen	3,802	
Cases attended by medical students Queen's Hospital	527	
,, ,, ,, ,, ,, General Hospital	170	

If every baby born in Birmingham in 1925 had been attended by a midwife and a fee of 30/- obtained for each attendance without any bad debt, each midwife would have received on an average £2 per week. It is evident that a large number of these midwives do not make an income sufficient to keep themselves by their work.

The number of cases attended by individual midwives was as follows:—

Midwives who attended over 300 cases	2
Between 200 and 300 ,, ...	6
,, 100 and 200 ,, ...	27
,, 50 and 100 ,, ...	42
,, 25 and 50 ,, ...	38
,, 10 and 25 ,, ...	39
Under 10 cases	42
No cases	13

35 midwives are earning a living.

42 more are earning a doubtful living.

132 are obviously not earning enough to support themselves and in many cases have to supplement this work by other forms of nursing, etc.

Many midwives continue to experience difficulty in obtaining any fee, yet maternity benefit is given to practically all the cases they attend, often, however, long after the midwife has ceased to attend.

Medical Help.

A midwife is required to send for medical help in cases of difficulty or danger and for this purpose has to send a written message to the doctor, a copy of which is furnished to the Public Health Department.

During 1925 the Birmingham midwives sent for medical aid in 2,211 cases, 19 per cent. of all the confinements.

Reasons for Sending for Medical Help.

For Mother (1,635).		For Child (576).	
Delayed labour	580	Ophthalmia	210
Laceration of perineum	399	Prematurity	113
Hæmorrhage	115	Convulsions	15
Adherent placenta	85	Jaundice	29
Abnormal presentation	97	Deformity	31
Abortion or miscarriage	28	Skin eruptions	78
Rise of temperature	137	Other causes	100
Other causes	194		

The Midwives Act of 1918 requires that the Local Authority shall pay the doctor in these cases and may recover the fee from the patient. The payment is made in accordance with a scale.

During 1925-26 claims were made by doctors in 674 cases. The total amount paid was £907 12s. 1d. Of this amount, £695 19s. 7d. was recovered during the year, representing about 70 per cent. The process of recovery is carried out by a sub-department of the City Treasurer's Department, and its cost was £207 13s. 10d.

During 1925 an arrangement was entered into with the Board of Guardians to admit certain women to their hospitals for confinement. This became necessary because of the considerable number of women who had not reasonable accommodation in their own homes. In many cases the only accommodation for man, wife and family was a single room occupied as a lodging.

In each instance a case sheet is made out of the home conditions and income, and this is submitted to the Public Health Department for approval. During the nine months in 1925 in which the scheme was in operation, 938 women were admitted for confinement, the cost being £3,790 10s. 2d., or £4 per case, exclusive of what the patient paid.

In addition to the cases admitted because of inadequate house accommodation there were the ordinary cases admitted to these hospitals on account of destitution. During 1925 3,135 cases were confined in the following public institutions:—

Union Infirmaries	1,729
The Maternity Hospital	844
Heathfield Road Home	262
Hope Lodge	20
Woodville	10
	2,865

This is equal to about 16 per cent. of the total births for the year.

Midwife Supervision.—The two Midwife Inspectors paid 385 visits to midwives at their homes, and had 264 interviews with midwives at the Council House. They paid 1,022 visits in regard to cases for medical assistance; 529 visits to cases of reported ophthalmia neonatorum; 185 visits to stillbirths and 131 visits to cases of Puerperal Fever.

Puerperal Sepsis.—During 1925 there were notified 146 cases of this disease and 35 deaths were registered.

Year.	Cases.	Deaths.	Deaths per 1,000 births.
1912	78	27	1.22
1913	112	44	1.85
1914	149	33	1.42
1915	161	35	1.65
1916	170	31	1.50
1917	97	26	1.47
1918	92	29	1.72
1919	105	23	1.19
1920	148	51	2.03
1921	105	26	1.17
1922	137	25	1.26
1923	186	34	1.78
1924	120	37	2.01
1925	146	35	1.96

The table indicates that with all the care now taken no substantial reduction in this distressing disease is taking place. One mother contracted the infection in every 150 confined during the year.

The cases may be classified as follows:—

	Cases of Puerperal Fever	Deaths.	Percentage Fatality.
After full time labour	122	21	17%
After premature labour	4	1	25%
After abortion	20	13	65%

Of the 140 cases, 90 were removed to the Women's Hospital, 30 to the Infirmaries and 5 to other hospitals.

A great deal has been written during 1925 on methods of preventing puerperal mortality. Steps have recently been taken for the better education of medical students and midwives in this part of their work. Some investigations are in progress to ascertain whether if perfect conditions were available the number of cases would diminish.

The Public Health Department have made arrangements with the Women's Hospital whereby any notified case can be removed to hospital at any time by day or night in an ambulance and treated by the specialists at the hospital. This is entirely free of charge. It secures good nursing and the best professional supervision and it is possible to give this at the earliest time.

OPHTHALMIA NEONATORUM.

The cases of this disease reported during the past ten years are set out in the following table :—

Year.	No. of cases reported.	No. of babies blind in : One eye.	Both eyes	No. of babies with eyes otherwise impaired.
1916	334	3	0	7
1917	237	3	0	6
1918	228	3	0	6
1919	282	4	0	5
1920	444	?	?	6
1921	427	1	0	—
1922	484	1	0	1
1923	433	—	—	10
1924	413	1	1	1
1925	335	—	2	3

Five of the cases notified last year resulted in damage to the eyes as follows :—

No.	By whom confined.	Prophylactic used.	Where treated.	Result.
1.	Selly Oak Hospital.	?	Eye Hospital (When over 3 months old).	Totally blind.
2.	Doctor and Midwife.	Sol. Arg. Nit.	Eye Hospital (23rd day). Was then blind.	Totally blind.
3.	Maternity Hospital.	,,	Eye Hospital (10th day).	Both eyes very defective.
4.	General Hospital.	,,	Eye Hospital (When 1 month old).	Left eye slightly defective.
5.	Dudley Road Hospital.	?	Eye Hospital (18th day).	Right eye slightly scarred. Vision unaffected.

Cases treated at home	33
Cases treated at hospital (including 8 in-patients)	302
Total	335

RICKETS.

Fourteen deaths were registered as due to this disease during 1925. This common ailment is, however, probably responsible for as much ill-health and inefficiency as any of the great killing diseases.

Six of these deaths in Birmingham were associated with broncho-pneumonia, two with convulsions and four with marasmus. Several of these cases were from overcrowded houses where ignorance and carelessness prevailed.

It is estimated at the child welfare centres that from 10 to 12 per cent. of the infants attending suffer from rickets which can be recognised clinically and which can be demonstrated by means of an X-Ray photograph of the bones.

Few of these children now develop bent bones so that the general public do not recognise them as cases of rickets.

The disease, although not confined to the poorer parts of the City is mainly one occurring in children who are reared in the centre of our large towns. It does not occur to any extent in Asia, Africa or South America—districts where sunlight and open-air enter into the lives of the people. It is less prevalent in our rural districts than in our towns.

Its main importance lies in the fact that it stunts growth—it deforms the pelvis and makes confinement in women difficult or dangerous—it lowers the vitality of the sufferer and renders him liable to many ailments which he otherwise would not suffer from. It causes decay of the teeth.

There seems to be no doubt that in cases of even early rickets there is defective calcification of the teeth permitting of early decay and all the damaging consequences which decayed teeth produce. It is said that this is the main reason why the teeth of most artisans are so defective. No regular cleaning and care will overcome this defect in the primary structure of the teeth.

It is probable, also, that the stunted growth of many of the artisan classes is mainly due to early rickets.

It is recorded by many competent observers that more infants suffer from rickets during winter than during summer months.

Doubtful cases of rickets occurring in Birmingham were sent during 1925 to the Carnegie Institute for X-Ray examination of the bones. Altogether 657 were so examined and 124 were found to be suffering from rickets, i.e., 19 per cent. This percentage is probably too high for the infants in the City as a whole, for many of the cases sent were obviously clinical cases of the disease.

The prevention of rickets depends on

(1) The proper feeding and care of the mother when her infant is born. It is found that the infants of mothers who are housed in dark dwellings, without a reasonable amount of open-air exercise and with food deficient in the antirachitic vitamin are more liable to develop rickets than others.

(2) All infants fed on a diet deficient in Vitamin A are liable to contract rickets.

(3) Infants kept indoors suffer more than those having abundance of fresh air and sunlight.

From this it would appear that education of the mother in the need of correct feeding is paramount, and almost equally important is the need for securing for every family dwelling a yard or garden into which young children can be placed so that they may obtain the necessary fresh air and sunlight.

The remedy, then for the deplorable state of affairs is in the first instance a general recognition of the need for better knowledge as to diet for young and old and a better recognition of the need for open-air and sunlight for young children.

TABLE I.

Vital Statistics during 1925 *and previous years.*

Year.	Population Estimated to middle of each Year.	BIRTHS.		DEATHS.		INFANT MORTALITY.		DEATHS FROM											
								Influenza.		Tuberculosis.		Cancer.		Heart Disease. (Organic).		Bronchitis.		Pneumonia.	
		Number.	Rate.	Number.	Rate.	Deaths.	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.
1901	760,989	23,866	31.4	13,290	17.5	4,205	176	122	.16	1,515	1.99	552	.73	896	1.18	1,363	1.80	1,173	1.55
1902	768,757	24,246*	31.2	12,650*	16.3	3,503*	144	97*	.12	1,356*	1.75	530*	.68	932*	1.20	1,270*	1.64	1,135 *	1.46
1903	776,604	23,956	30.9	12,224	15.8	3,525	147	79	.10	1,362	1.76	592	.76	905	1.17	1,131	1.46	1,025	1.32
1904	784,532	24,260	31.0	13,882	17.7	4,346	179	104	.13	1,369	1.75	578	.74	943	1.20	1,378	1.76	1,165	1.49
1905	792,540	22,939	29.0	11,948	15.1	3,224	141	107	.14	1,316	1.67	643	.81	889	1.12	1,131	1.43	1,084	1.37
1906	800,631	23,484	29.4	12,737	15.9	3,682	157	123	.15	1,203	1.51	664	.83	956	1.20	1,103	1.38	1,056	1.32
1907	808,803	23,233	28.8	12,356	15.3	3,084	133	128	.16	1,241	1.54	645	.80	1,041	1.29	1,201	1.49	1,189	1.47
1908	817,060	23,986*	29.1	12,596*	15.3	3,124*	130	255*	.31	1,308*	1.59	702*	.85	1,028*	1.25	1,214*	1.47	1,005*	1.22
1909	825,400	22,555	27.4	12,398	15.1	2,727	121	151	.18	1,256	1.52	678	.82	972	1.18	1,214	1.47	1,124	1.36
1910	833,826	22,288	26.8	11,001	13.2	2,570	115	93	.11	1,168	1.40	737	.89	954	1.15	1,034	1.24	954	1.15
1911	842,337	21,975	26.1	12,623	15.0	3,298	150	79	.09	1,230	1.46	748	.89	1,013	1.21	1,054	1.25	972	1.16
1912	850,947	22,168	26.1	12,005	14.1	2,470	111	98	.12	1,292	1.52	791	.93	969	1.14	1,073	1.26	1,017	1.20
1913	859,644	23,812*	27.3	12,962*	14.9	3,070*	129	112*	.13	1,341*	1.53	893*	1.02	1,135*	1.30	1,044*	1.20	988*	1.13
1914	882,534	23,207	26.4	13,026	14.8	2,839	122	142	.16	1,293	1.47	773	.88	1,301	1.48	1,109	1.26	1,090	1.24
1915	891,234	21,187	23.8	12,816	14.4	2,490	118	146	.16	1,377	1.55	885	1.00	1,338	1.51	1,219	1.37	1,140	1.28
1916	895,678	20,618	23.1	12,081	13.5	2,142	104	146	.16	1,324	1.48	897	1.00	1,290	1.45	1,148	1.29	1,006	1.13
1917	900,000	17,706	19.7	11,274	12.6	1,791	101	98	.11	1,405	1.56	912	1.02	1,298	1.45	910	1.01	846	0.94
1918	870,000	16,840	19.4	13,175	15.2	1,674	99	2,172	2.50	1,385	1.60	883	1.02	1,183	1.36	1,059	1.22	1,270	1.46
1919	910,000	19,335*	20.9	12,000*	13.0	1,630*	84	1,062*	1.15	1,188*	1.28	935*	1.01	1,187*	1.28	1,285*	1.39	1,013*	1.10
1920	910,000	25,069	27.6	11,409	12.6	2,072	83	421	.46	1,001	1.10	1,014	1.12	1,143	1.26	1,066	1.17	1,011	1.11
1921	919,683	22,134	24.1	10,361	11.3	1,838	83	134	.15	1,035	1.13	1,020	1.12	1,113	1.21	798	0.87	950	1.04
1922	927,844	19,850	21.5	11,212	12.1	1,705	86	442	.48	1,049	1.13	1,090	1.18	1,214	1.31	1,080	1.17	998	1.08
1923	936,079	19,069	20.4	10,248	11.0	1,370	72	264	.28	1,006	1.08	1,092	1.17	1,120	1.20	897	0.96	834	0.89
1924	944,386	18,390*	19.2	11,181*	11.6	1,518*	83	375*	.39	1,055*	1.10	1,251*	1.30	1,256	1.31	1,021*	1.06	916*	0.95
1925	952,766	17,836	18.8	11,102	11.7	1,389	78	370	.39	1,083	1.14	1,204	1.27	1,334	1.40	870	0.92	887	0.93

* 53 Weeks.

TABLE II.

Causes of, and Ages at Death during the Year ending January 2nd, 1926.

CAUSE OF DEATH.	AGES.																Males	Females	Persons.
	0-	1-	2-	3-	4-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	85-			
I.—GENERAL DISEASES.																			
Enteric Fever	—	—	—	—	—	1	—	—	1	1	1	—	—	—	—	—	1	3	4
Typhus Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Relapsing Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smallpox—																			
(*a*) Vaccinated	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(*b*) Not Vaccinated	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(*c*) Doubtful	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	24	56	9	8	3	9	—	—	—	—	—	—	—	—	—	—	51	58	109
Scarlet Fever	—	2	3	3	4	6	1	2	—	1	—	—	—	—	—	—	10	12	22
Whooping Cough	94	83	23	9	9	4	—	—	—	—	—	—	—	—	—	—	112	110	222
Diphtheria	6	10	10	14	14	32	7	—	2	—	—	—	—	—	—	—	45	50	95
Croup	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Influenza	8	3	3	4	1	5	5	8	11	18	41	60	79	78	38	8	194	176	370
Miliary Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Asiatic Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera Nostras	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	1
Plague	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Yellow Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Leprosy	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	2	—	—	1	—	—	—	—	—	3	2	3	1	6	6	1	12	13	25
Other Epidemic Diseases	3	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	3	2	5
Pyaemia, Septicaemia	1	—	—	—	—	1	1	1	—	1	2	1	2	1	—	—	6	5	11
Glanders	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Anthrax	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	1
Rabies	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tetanus	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	2	—	2
Mycoses	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pellagra	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Beri-Beri	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pulmonary Tuberculosis	1	2	—	2	—	3	15	61	103	180	187	194	103	27	1	—	538	341	879
Acute Phthisis	—	1	1	—	—	—	4	2	1	7	12	3	3	—	—	—	16	18	34
Acute Miliary Tuberculosis	2	5	—	3	1	1	—	—	2	1	1	1	—	—	—	—	11	6	17
Tuberculous Meningitis	11	14	9	5	9	16	4	—	5	3	1	1	—	1	—	—	39	40	79
Tuber. (Periton. Intes.)	4	2	—	1	—	3	2	2	2	1	2	1	1	1	—	—	8	14	22
Tuberc. (Spine)	—	—	1	—	—	—	2	2	1	1	—	3	2	—	—	—	6	6	12
Tuberc. (Joints)	—	—	—	—	—	—	1	1	2	1	2	2	1	—	1	—	6	5	11
Tuberc. (Other Organs)	—	—	—	—	—	—	1	—	—	5	2	—	4	—	—	—	7	5	12
Disseminated Tuberc.	2	1	1	1	—	2	3	—	2	2	2	—	1	—	—	—	13	4	17
Rickets	6	5	3	—	—	—	—	1	—	—	—	—	1	—	—	—	10	6	16
Syphilis	3	—	—	—	—	—	2	—	—	1	3	1	5	3	2	—	12	8	20
Other Venereal Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cancer (buccal cavity)	—	—	—	—	—	—	—	—	—	—	2	15	24	12	8	1	52	10	62
Cancer (stomach, liver, etc.)	—	2	—	—	—	—	—	1	1	3	17	67	103	90	44	4	192	140	332
Cancer (periton. intest.)	—	—	—	—	—	—	—	—	—	4	21	40	74	103	46	3	172	119	291
Cancer (female organs)	—	—	—	—	—	—	—	—	—	5	16	48	33	23	7	1	—	133	133
Cancer (breast)	—	—	—	—	—	—	—	—	1	3	16	37	28	28	10	2	—	125	125
Cancer (skin)	—	—	—	—	—	—	—	—	—	1	—	1	6	5	3	1	14	3	17
Cancer (other organs)	—	—	1	1	1	—	1	2	3	4	23	54	66	63	22	3	168	76	244
Other Tumours	—	—	—	—	—	—	—	—	—	—	1	2	2	—	—	—	2	3	5
Rheumatic Fever	—	—	—	—	—	11	11	7	2	4	5	1	1	2	1	—	14	31	45
Chronic Rheumatism	—	—	—	—	—	—	—	—	—	1	—	2	10	14	3	1	14	17	31
Gout	—	—	—	—	—	—	—	—	—	—	—	—	5	11	3	—	13	6	19
Scurvy	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	2	—	2
Diabetes	—	—	—	—	—	—	1	—	3	2	3	17	21	28	8	—	39	44	83
Exoph. Goitre	—	—	—	—	—	—	—	—	2	1	1	7	2	3	—	—	2	14	16
Addison's Disease	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	2	—	2
Leucocy., Lymphad	—	1	—	—	—	2	1	1	3	4	3	7	3	—	—	—	13	12	25
Anaemia, Chlorosis	—	—	1	—	—	1	2	1	1	8	4	9	7	13	1	—	21	27	48
Other General Diseases	1	—	—	—	—	—	—	2	1	1	—	—	2	—	—	—	3	4	7
Alcoholism	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	2	—	2
Chron. Lead Poisoning	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—

TABLE II.—*Continued.*

CAUSE OF DEATH.	AGES.																Males	Fe-males	Per-sons.
	0-	1-	2-	3-	4-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	85-			
Other Poisonings (occupational) ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Poisonings (not occupational)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
II.—Nervous System.																			
Encephalitis Lethargica	2	—	—	1	2	1	2	5	4	2	2	6	2	4	—	—	17	16	33
Other Encephalitis	—	—	—	1	1	2	1	—	1	—	—	1	1	—	1	—	3	6	9
Cerebro-spinal Fever	3	—	2	—	—	—	—	1	—	—	—	—	—	—	—	—	3	3	6
Meningitis (other forms)	17	10	3	2	2	7	2	—	—	1	1	2	1	—	—	—	29	19	48
Locomotor Ataxy	—	—	—	—	—	—	1	—	—	2	2	6	6	1	—	—	14	4	18
Ac. Poliomyelitis	—	1	—	—	1	—	—	—	—	—	1	—	—	—	—	—	2	1	3
Polioencephalitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Dis., Spinal Cord	—	—	—	—	—	—	—	4	1	7	6	20	13	17	6	1	45	30	75
Cerebral Haemorrhage Apoplexy ...	—	—	—	—	—	—	1	—	2	3	10	57	111	162	101	26	207	266	473
Softening of Brain	—	—	—	—	—	—	—	—	—	—	1	—	3	5	1	—	7	3	10
Paralysis (no sp. cause)	—	—	—	1	—	—	—	—	—	—	—	6	10	14	10	1	16	26	42
Gen. Par. of Insane	—	—	—	—	—	—	—	—	—	4	11	13	8	1	—	—	32	5	37
Other Mental Alienation	—	—	—	—	—	—	—	—	—	—	1	2	5	1	—	—	6	3	9
Epilepsy	—	—	—	—	1	3	—	3	8	7	4	10	7	12	6	1	39	23	62
Convulsions (5 and over)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convulsions (under 5)...	47	13	3	2	—	—	—	—	—	—	—	—	—	—	—	—	45	20	65
Chorea	—	—	—	—	—	2	1	—	—	—	—	—	1	—	2	—	3	3	6
Hysteria, Neuralgia, Neuritis ...	—	—	—	—	—	—	—	—	—	—	2	2	1	2	—	—	3	4	7
Other Diseases of Nervous System ...	3	1	1	1	1	1	4	—	1	6	7	10	5	3	1	—	28	17	45
Dis. of Eyes and Annexa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mastoid Disease	1	—	—	—	1	3	3	—	—	2	1	1	—	—	—	—	6	6	12
Other Diseases of Ears	2	1	—	—	—	—	1	1	1	3	1	2	—	—	—	—	7	5	12
III.—Circulatory System.																			
Pericarditis	1	1	2	—	—	2	—	1	—	2	2	1	2	1	—	—	10	5	15
Acute Endocarditis	—	—	—	—	—	3	4	3	5	6	17	20	6	2	2	—	31	37	68
Valvular Disease	—	—	—	—	—	2	12	8	10	30	41	70	86	111	65	9	208	236	444
Fatty Degen. of Heart	—	—	—	—	—	—	—	—	—	1	—	8	8	8	1	—	9	17	26
Other Dis. of Heart	—	—	—	—	—	1	1	4	2	7	35	61	152	274	258	69	417	447	864
Angina Pectoris	—	—	—	—	—	—	—	—	—	—	1	4	5	12	2	—	18	6	24
Aneurysm	—	—	—	—	—	—	—	—	—	2	1	12	6	3	1	—	20	5	25
Arterio-sclerosis	—	—	—	—	—	—	—	—	—	—	3	12	48	123	84	29	163	136	299
Other Dis. of Arteries...	—	—	—	—	—	—	—	—	—	1	—	1	2	4	3	—	6	5	11
Cer. Embolism, Throm.	—	—	—	1	—	—	—	—	—	1	7	13	42	51	41	8	84	80	164
Other Emb. and Throm.	—	—	—	—	—	—	—	1	—	1	2	3	2	6	2	—	10	7	17
Dis. of Veins	—	—	—	—	—	—	—	1	—	—	1	1	4	2	2	—	3	8	11
Status Lymphaticus	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2
Other Dis. of Lymph. System ...	1	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	1	2	3
Other Dis. of Circulatory System ...	—	—	—	—	—	—	—	—	—	2	4	2	4	14	7	4	16	21	37
IV.—Respiratory System.																			
Dis. of Nasal Fossae	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dis. of Larynx	2	1	1	1	—	—	—	—	1	—	—	—	—	1	—	—	5	2	7
Dis. of Thyroid Body	—	—	—	—	—	—	—	3	—	—	—	—	1	1	—	—	4	1	5
Bronchitis	80	27	2	4	3	4	—	1	1	6	24	57	104	245	230	82	437	433	870
Broncopneumonia	168	111	32	11	7	6	—	—	2	8	8	22	26	32	19	4	251	205	456
Lobar Pneumonia	10	5	2	1	1	10	5	7	8	20	32	45	32	27	14	1	146	74	220
Pneumonia (type not stated) ...	18	12	5	5	1	6	4	7	6	12	29	35	32	18	16	5	128	83	211
Pleurisy	3	1	1	1	1	—	1	—	2	—	2	1	4	8	1	—	18	8	26
Pul. Cong., Pul. Apop.	2	—	—	—	—	—	—	—	—	—	1	1	1	5	9	2	11	10	21
Gangrene of Lungs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Asthma	—	—	—	—	—	—	—	1	—	3	7	12	7	7	—	—	19	18	37
Pulmon. Emphysema	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	1	1	2
Fibroid Dis. of Lungs	—	—	—	—	—	—	—	1	—	1	1	—	3	1	1	—	6	2	8
Other Dis. of Respiratory System ...	—	—	—	—	—	—	—	—	—	—	—	2	3	4	—	—	9	—	9
V.—Digestive System.																			
Diseases of Teeth and Gums ...	2	—	—	—	—	—	—	1	—	—	—	1	1	1	—	—	4	2	6
Other Dis. of Mouth and Annexa ..	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	3	5
Dis. of Phar., Tonsilitis	1	—	2	1	4	2	—	1	—	3	1	1	1	—	—	—	8	9	17

TABLE II.—*Continued.*

CAUSE OF DEATH.	AGES.																Males	Fe-males	Per.-sons
	0-	1-	2-	3-	4-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	85-			
Dis. of the Œsophagus	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	1
Perf. Ulcer of Stomach	—	—	—	—	—	—	—	2	2	4	15	27	14	7	3	—	51	23	74
Inflammation of Stomach	11	2	—	—	—	—	1	—	—	—	1	3	3	11	9	1	19	23	42
Other Dis. of Stomach	—	—	—	—	—	—	—	—	—	1	—	1	2	3	—	—	2	5	7
Diarrhoea, Enteritis	171	30	6	4	1	5	1	3	1	9	5	11	13	11	5	—	176	100	276
Ankylostomiasis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Intest. Parasites	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Appendicitis	—	1	2	3	2	5	8	6	2	7	10	11	10	3	1	1	48	24	72
Hernia	4	—	—	—	—	—	—	—	—	2	1	1	6	8	6	1	10	19	29
Intestinal Obstruction	8	3	1	—	1	1	3	—	—	—	5	1	7	9	7	2	27	21	48
Other Dis. of Intestine	1	—	—	—	—	—	—	—	1	1	—	2	1	1	2	—	4	5	9
Acute Yellow Atrophy of Liver	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hydatid of Liver	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	1
Cirrhosis of Liver	—	—	—	—	—	1	—	—	—	—	5	15	20	12	1	—	27	27	54
Biliary Calculi	—	—	—	—	—	—	—	—	—	—	2	1	5	8	2	1	11	8	19
Other Dis. of Liver	—	—	—	—	—	—	—	—	—	—	3	2	3	3	2	1	7	7	14
Diseases of Spleen	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Peritonitis (cause unstated)	—	—	—	—	—	2	1	—	1	1	5	—	1	1	—	—	4	8	12
Other Diseases of Digestive System	1	—	—	—	—	—	—	—	—	1	—	2	6	1	—	—	3	8	11
VI.—Genito-Urinary System.																			
Acute Nephritis	2	—	1	2	1	1	1	2	2	4	3	7	1	2	—	—	16	13	29
Bright's Disease	—	—	—	—	—	—	3	6	6	5	18	48	64	46	17	3	112	104	216
Chyluria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Dis. of Kidneys and Annexa	1	1	—	1	1	—	—	—	1	3	2	4	2	—	2	—	8	10	18
Calculi. Urin. Passages	—	—	—	—	—	—	—	—	—	2	—	1	—	—	—	—	2	1	3
Diseases of Bladder	—	—	—	—	—	—	—	1	—	—	—	2	6	5	5	—	14	5	19
Diseases of Urethra, etc.	—	—	—	—	—	—	—	—	—	—	—	1	3	—	1	—	5	—	5
Diseases of Prostate	—	—	—	—	—	—	—	—	—	—	—	1	4	15	21	2	43	—	43
Diseases of Male Organs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Uterine Haemorrhage	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	1
Uterine Tumour	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	2	2
Other Diseases of Uterus	—	—	—	—	—	—	—	—	—	1	—	3	—	1	—	—	—	5	5
Ovarian Tumours	—	—	—	—	—	—	—	—	—	1	1	—	—	3	1	—	—	6	6
Other Diseases of Female Organs	—	—	—	—	—	—	—	—	—	2	3	—	1	—	—	—	—	6	6
Diseases of Breast	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
VII.—The Puerperal State.																			
Accidents of Pregnancy	—	—	—	—	—	—	—	—	—	8	4	—	—	—	—	—	—	12	12
Puerperal Haemorrhage	—	—	—	—	—	—	—	—	—	1	7	—	—	—	—	—	—	8	8
Other Accidents of Childbirth	—	—	—	—	—	—	—	—	1	4	5	—	—	—	—	—	—	10	10
Puerperal Fever	—	—	—	—	—	—	—	1	6	17	11	—	—	—	—	—	—	35	35
Puer. Alb'ria and Convulsions	—	—	—	—	—	—	—	—	1	2	2	—	—	—	—	—	—	5	5
Phleg. Dolens. Embolism	—	—	—	—	—	—	—	—	—	3	1	—	—	—	—	—	—	4	4
Puerperal Insanity	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Dis. of Breast	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
VIII.—Skin and Cellular Tissue.																			
Senile Gangrene	—	—	—	—	—	—	—	—	—	—	—	—	1	11	8	3	12	11	23
Gangrene (other types)	—	—	—	—	—	—	—	—	—	—	—	2	1	—	—	—	2	1	3
Carbuncle, Boil	—	—	—	—	—	—	—	—	—	—	1	1	1	—	2	—	3	2	5
Acute Abscess, Phlegmon	5	—	—	—	—	—	—	—	—	—	2	3	1	1	1	—	10	3	13
Dis. of Integumentary System	11	—	—	—	—	—	—	—	—	—	1	2	3	2	3	1	10	13	23
IX.—Bones and Organs of Locomotion.																			
Diseases of Bones	—	1	—	—	—	2	3	5	3	5	2	1	1	1	—	—	11	13	24
Diseases of Joints	—	—	1	—	—	—	—	—	—	—	—	—	1	1	1	—	3	1	4
Amputations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Dis. of Locomotor System	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
X.—Malformations.																			
Congenital Malformations	76	2	—	1	—	1	1	—	1	—	—	—	—	—	—	—	56	26	82

TABLE II.—*Continued.*

CAUSE OF DEATH.	AGES.																Males	Females	Persons.
	0-	1-	2-	3-	4-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	85-			
XI.—DISEASES OF EARLY INFANCY.																			
Premature Birth	345	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	199	146	345
Infantile Debility, Icterus, etc. ...	120	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	69	51	120
Other Diseases, Early Infancy ...	58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28	30	58
Lack of Care	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	4	7
XII.—OLD AGE.																			
Old Age	—	—	—	—	—	—	—	—	—	—	—	—	—	111	261	118	200	290	490
XIII.—EXTERNAL CAUSES.																			
Suicide—																			
By Poison	—	—	—	—	—	—	—	—	3	2	2	3	4	—	—	—	11	3	14
,, Asphyxia	—	—	—	—	—	—	—	—	—	2	7	8	2	4	—	—	11	12	23
,, Hanging, Strangulation	—	—	—	—	—	—	—	—	2	1	1	7	2	5	1	—	13	6	19
,, Drowning	—	—	—	—	—	—	—	1	1	—	3	7	8	2	—	—	16	6	22
,, Firearms	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	2	—	2
,, Cutting or Piercing	—	—	—	—	—	—	—	—	1	2	2	4	6	—	1	1	16	1	17
,, Jumping from High Places ...	—	—	—	—	—	—	—	—	—	1	1	2	—	1	—	—	5	—	5
,, Crushing	—	—	—	—	—	—	—	—	—	—	1	—	2	—	—	—	3	—	3
,, Other Suicides	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	1	1	2
Poisoning by Food	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Acute Poisonings	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	1
Conflagration	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Burns (Conflagration excepted) ...	2	6	8	9	—	9	—	3	—	2	2	2	2	2	2	—	29	20	49
Deleterious Gases	26	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	14	13	27
Accidental Drowning	—	—	—	—	2	3	3	—	—	2	—	2	—	—	—	—	11	1	12
Injury—																			
By Firearms	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
,, Cutting or Piercing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
,, Fall	—	4	—	2	1	2	2	2	—	2	2	11	12	15	17	14	50	36	86
,, Mines and Quarries	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
,, Machines	—	—	—	—	—	—	—	3	1	—	—	4	—	1	—	—	9	—	9
,, Other Crushing	—	—	2	1	2	12	8	11	10	16	13	16	9	12	3	1	89	27	116
,, By Animals	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	2	—	2
,, Starvation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
,, Excessive Cold	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
,, Effects of Heat	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
,, Lightning	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	1
,, Electricity	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Homicide by Firearms	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Homicide by Cutting or Piercing ...	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	1	1	2
Homicide, Other Means	—	—	—	—	—	—	—	1	—	—	3	1	1	—	—	—	4	2	6
Fractures (not specified)	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	1
Other Violence...	1	—	—	—	—	1	—	1	—	1	—	—	—	—	—	—	4	—	4
XIV.—ILL-DEFINED CASES.																			
Dropsy	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Syncope (1 and under 70)	—	—	—	—	—	—	—	—	—	2	—	2	1	2	—	—	3	4	7
Sudden Death (Not Defined) ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Heart Failure (1 and under 70) ...	1	—	—	—	—	—	—	—	—	1	1	4	5	3	—	—	10	5	15
Other Ill-Defined Causes	1	1	—	—	—	—	—	—	—	—	—	2	2	—	—	—	3	3	6
Cause not Specified	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
TOTALS	1389	425	142	109	79	198	142	199	253	529	797	1338	1588	2021	1476	417	5892	5210	11102

TABLE III. *Births and Deaths Registered in, or belonging to. each Ward during the Year ending January 2nd, 1926.*

Causes of Death.	Acock's Green.	All Saints'	Aston.	Balsall Heath	Duddeston and Nechells	Edgbaston	Erdington (North)	Erdington (South)	Handsworth	Harborne	King's Norton	Ladywood	Lozells	Market Hall	Moseley and King's Heath	Northfield	Rotton Park	St. Bartholomew's	St. Martin's	St. Mary's	St. Paul's	Saltley	Sandwell	Selly Oak	Small Heath	Soho	Sparkbrook	Sparkhill	Washwood Heath	Yardley	Not Located	City
Enteric Fever	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	4
Small Pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	—	7	4	4	15	—	—	2	1	1	—	4	1	6	2	1	4	13	19	6	7	1	—	2	—	4	4	—	1	—	—	109
Scarlet Fever	—	2	1	1	—	—	1	—	—	—	2	—	1	—	—	—	1	1	1	1	5	—	—	2	—	2	—	—	—	1	—	22
Whooping Cough	2	19	12	5	13	3	4	1	1	4	5	9	3	6	1	1	10	18	26	25	15	4	2	3	2	1	4	3	17	3	—	222
Diphtheria, Croup ...	6	10	5	4	5	3	1	—	—	1	2	11	5	2	—	1	4	5	4	4	7	1	—	—	4	1	2	—	6	1	—	95
Influenza	21	21	14	12	15	22	6	8	12	8	8	7	11	8	11	5	13	19	10	10	17	9	8	5	17	16	18	15	16	7	1	370
Erysipelas	—	—	2	1	1	—	1	1	—	—	—	1	1	—	—	—	—	2	3	4	3	—	1	1	—	—	2	—	—	1	—	25
Pulmonary Tuberculosis	20	48	50	37	49	23	14	11	17	14	13	35	29	27	16	10	35	61	87	75	52	31	12	19	20	15	34	24	35	13	4	930
Tuberculous Meningitis ...	1	4	3	2	6	1	1	3	1	—	3	2	2	2	3	—	3	2	7	7	3	3	1	3	1	2	2	3	6	1	1	79
Abdominal Tuberculosis ...	—	1	1	1	3	—	1	1	—	—	—	—	—	—	2	—	2	—	4	2	2	—	—	—	—	—	—	—	1	1	—	22
Other Tuberculous Dis. ...	—	1	3	—	3	—	2	—	2	—	1	3	3	—	—	1	1	3	5	2	2	3	2	3	3	1	2	1	1	2	2	52
Cancer	35	44	69	57	39	58	26	31	31	23	27	40	52	25	54	6	57	46	50	41	44	38	26	29	37	44	57	40	42	27	9	1204
Rheumatic Fever ...	—	2	3	4	1	1	—	—	—	—	—	1	3	1	—	2	3	3	4	2	2	—	2	2	—	2	3	2	1	1	—	45
Diabetes	2	6	9	1	2	8	1	1	3	—	—	2	5	1	5	—	5	2	3	2	5	4	—	6	4	3	2	1	—	—	—	83
Encephalitis Lethargica ...	2	—	2	—	2	—	2	—	—	—	—	—	3	—	2	1	2	3	2	—	2	1	—	—	4	1	—	1	1	2	—	33
Cerebro-Spinal Fever ...	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	1	—	—	1	—	—	—	—	—	—	—	6
Meningitis (other forms) ...	—	1	3	2	6	2	2	2	—	2	1	1	1	3	3	—	5	1	2	4	1	1	1	1	1	—	—	1	1	—	—	48
Polio-Encephalitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis ...	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	3
Cereb'l Haemorr., Apop.	7	16	13	20	26	24	12	9	20	9	9	20	21	7	17	4	24	20	29	23	20	15	13	11	9	17	14	12	11	13	8	473
Convulsions	—	2	7	4	4	1	1	—	1	—	2	3	4	1	2	—	2	3	3	4	3	2	2	1	—	4	4	—	5	—	—	65
Organic Dis. of Heart ...	40	74	81	54	84	44	31	27	33	10	20	36	75	35	46	12	47	63	82	52	61	43	8	27	37	36	42	45	42	23	24	1334
Arterio-Sclerosis	10	16	6	22	11	9	5	7	11	7	17	2	9	9	15	3	10	9	16	15	6	7	8	9	13	16	8	5	7	3	8	299
Cereb'l Embol., Thromb.	5	10	8	9	9	10	2	4	1	—	2	5	6	4	4	1	11	6	11	7	7	4	1	3	4	5	5	6	5	5	4	164
Bronchitis	11	36	62	43	56	23	10	10	17	18	12	33	38	9	21	8	34	51	59	49	33	18	18	26	28	32	37	19	34	12	13	870
Pneumonia	15	44	46	29	64	29	17	11	15	12	10	37	36	21	21	3	61	63	64	66	43	19	10	13	24	26	27	15	30	11	5	887
Other Respiratory Dis. ...	4	9	10	8	10	5	2	1	—	1	3	7	1	2	4	—	6	5	7	6	1	4	2	5	2	3	4	2	—	1	—	115
Diarrhoea, Enteritis, etc—																																
Under two years... ...	—	10	5	5	23	5	—	1	4	—	2	9	3	6	—	1	8	30	16	24	17	7	1	3	6	3	4	3	3	—	2	201
Two years and over ...	4	7	3	2	4	2	—	1	1	1	—	1	3	2	4	1	5	5	4	4	3	3	1	—	2	1	6	1	4	—	—	75
Appendicitis, Typhlitis ...	2	4	3	5	1	2	2	—	1	1	—	2	2	1	3	1	5	2	4	1	4	3	—	1	1	8	6	3	2	2	—	72
Cirrhosis of Liver ...	2	7	1	2	2	4	—	1	6	1	1	—	3	2	—	—	3	3	3	—	2	—	1	1	—	2	2	2	1	1	1	54
Alcoholism...	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	2
Nephritis & Bright's Dis.	13	8	11	12	13	14	1	1	5	7	3	9	13	10	8	1	12	12	13	7	9	11	2	5	6	7	8	7	6	9	2	245
Puerperal Fever	2	2	2	3	2	—	—	—	—	1	1	2	1	1	1	1	—	1	2	2	2	1	—	3	—	1	2	—	1	1	—	35
Other Acc. and Dis. of ... Pregnancy & Parturit'n	—	5	4	1	4	1	—	1	1	1	1	1	2	1	—	—	—	1	2	3	4	—	1	—	—	—	1	1	3	—	—	39
Congenital Debility and Malformation, Premature Birth ...	13	32	45	13	33	17	17	8	11	3	10	23	19	15	8	6	22	31	37	27	26	23	5	8	14	16	22	13	24	5	1	547
Old Age	21	20	17	23	20	17	10	7	15	8	9	14	25	13	20	9	30	13	13	30	18	10	7	11	18	15	21	13	25	7	11	490
Accidents or Negligence ...	11	14	15	16	17	15	7	5	6	3	7	10	11	4	4	4	15	17	24	10	11	19	3	11	10	4	16	5	12	9	1	316
Suicides	3	6	5	6	4	2	1	3	5	1	—	3	2	2	3	1	10	5	5	5	2	2	5	4	3	3	7	2	5	2	—	107
Other Causes	45	68	57	52	54	61	33	28	43	27	34	48	38	22	41	11	72	56	66	75	45	38	24	38	40	40	67	47	50	21	19	1360
TOTAL DEATHS	299	556	583	460	602	406	213	186	265	164	206	381	433	248	321	95	522	576	689	596	486	325	167	257	310	331	434	292	398	185	116	11102
DEATHS UNDER 1 YEAR ...	30	80	97	42	117	30	25	11	23	8	23	49	49	43	14	7	44	106	118	95	92	45	10	24	27	30	46	28	55	14	7	1389
BIRTHS	568	873	933	654	1153	430	465	340	360	189	350	673	566	360	356	180	832	996	1105	954	766	693	257	475	468	452	600	511	803	313	161	17836

TABLE IV.

Deaths under 1 year Registered in, or belonging to, each Ward during the Year ending January 2nd, 1926.

Causes of Death.	Acock's Green	All Saints'	Aston	Balsall Heath	Duddeston and Nechells	Edgbaston	Erdington (North)	Erdington (South)	Handsworth	Harborne	King's Norton	Ladywood	Lozells	Market Hall	Moseley and King's Heath	Northfield	Rotton Park	St. Bartholomew's	St. Martin's	St. Mary's	St. Paul's	Saltley	Sandwell	Selly Oak	Small Heath	Soho	Sparkbrook	Sparkhill	Washwood Heath	Yardley	Not Located	City
Measles	—	1	2	1	6	—	—	—	—	—	—	—	—	3	—	—	—	3	3	—	3	—	—	1	—	—	1	—	—	—	—	24
Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	—	8	6	2	9	1	1	—	1	1	3	2	3	2	1	—	1	7	12	12	7	1	—	—	1	—	3	2	6	2	—	94
Diphtheria, Croup ...	—	—	—	—	—	—	—	—	—	—	—	—	2	1	—	—	—	1	—	1	—	—	—	—	—	—	—	—	1	—	—	6
Influenza	1	1	—	—	—	—	1	1	—	—	—	—	1	—	—	—	—	1	—	1	1	—	—	—	—	—	—	—	—	—	—	8
Tuberculous Meningitis ...	1	2	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	5	—	—	—	—	—	—	—	—	1	—	—	—	11
Abdominal Tuberculosis ...	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	4
Other Tuberculous Dis. ...	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	1	—	—	—	—	1	—	—	5
Rickets	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	2	1	—	—	—	—	1	—	—	—	—	—	—	6
Syphilis	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	3
Encephalitis Lethargica ...	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	2
Cerebro-Spinal Fever ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	3
Meningitis (not tuberculous)	—	1	1	1	5	1	1	—	—	2	—	—	—	1	—	—	1	—	—	—	—	—	—	1	1	—	—	1	—	—	—	17
Convulsions	—	2	4	2	2	—	1	—	1	—	2	1	4	1	2	—	1	2	2	3	2	2	2	1	—	4	3	—	3	—	—	47
Bronchitis	1	3	10	1	9	—	—	1	1	—	1	3	3	1	—	—	—	12	7	6	8	3	—	3	1	—	2	—	3	1	—	80
Pneumonia (all forms) ...	4	16	9	7	18	3	2	—	3	—	1	6	9	8	1	1	8	16	21	13	18	6	1	—	2	5	2	5	7	4	—	196
Gastritis	—	—	3	—	2	—	—	—	—	—	2	—	—	1	—	—	—	1	—	—	—	1	—	—	—	—	—	—	1	—	—	11
Diarrhoea, Enteritis, etc.	—	8	5	5	23	4	—	1	3	—	2	9	3	4	—	—	8	24	13	17	15	5	1	3	5	2	4	3	3	—	1	171
Congenital Malformations	2	2	7	1	8	1	4	2	2	—	1	2	1	2	—	2	4	3	2	3	2	3	2	3	3	4	2	2	6	—	—	76
Premature Birth ...	6	23	27	10	16	15	11	5	8	2	7	15	14	12	7	3	11	21	27	13	13	13	1	3	10	8	14	9	15	5	1	345
Atrophy, Debility and Marasmus	5	7	11	2	8	1	1	1	1	1	1	6	4	1	1	1	7	7	7	11	11	7	2	2	—	4	6	2	2	—	—	120
Atelectasis	2	—	3	2	1	—	1	—	—	—	1	2	2	—	1	—	—	1	2	1	—	—	—	1	—	—	1	—	—	—	—	21
Injury at Birth	2	2	4	1	1	—	—	—	2	—	—	—	1	—	—	—	2	1	2	2	2	—	—	3	2	—	1	2	2	—	1	33
Neglect (under 3 months)	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	2	7
Suffocation (overlying) ...	1	1	1	4	—	1	—	—	—	—	—	1	—	2	—	—	—	1	3	2	2	2	—	—	—	—	2	1	1	1	—	26
Other Causes	4	—	3	2	6	3	1	—	1	2	2	2	1	2	—	—	1	4	7	7	6	2	1	2	1	3	5	—	3	—	2	73
All Causes	30	80	97	42	117	30	25	11	23	8	23	49	49	43	14	7	44	106	118	95	92	45	10	24	27	30	46	28	55	14	7	1389

TABLE V.

Cases of Infectious Diseases notified during each week of the year 1925.

Week		Enteric Fever.	Continued Fever.	Malaria.	Trench Fever.	Smallpox	Scarlet Fever.	Diphtheria.	Dysentery.	Erysipelas.	Pulmonary Tuberculosis.	Other Tuberculosis.	Encephalitis Lethargica.	Cerebro-Spinal Fever.	Poliomyelitis.	Polio-Encephalitis.	Pneumonia.	Puerperal Fever.	Ophthalmia Neonatorum.	Total.
Number.	Ending																			
	1925.																			
1	Jan. 10	2	—	—	—	—	35	54	—	4	34	6	1	—	—	—	52	6	5	199
2	,, 17	2	—	—	—	—	40	56	—	13	25	4	2	—	—	—	36	2	1	181
3	,, 24	1	—	—	—	—	38	63	—	5	34	3	4	1	—	—	29	3	13	194
4	,, 31	1	—	—	—	—	33	55	1	6	41	3	1	1	1	—	36	3	7	189
5	Feb. 7	—	—	—	—	—	36	56	—	10	31	3	—	—	1	—	35	2	17	191
6	,, 14	2	—	—	—	—	36	46	—	5	33	6	1	—	—	—	37	3	7	176
7	,, 21	3	—	—	—	—	46	49	—	2	26	8	4	—	—	—	51	4	10	203
8	,, 28	2	—	—	—	—	37	48	—	8	25	5	1	—	—	—	30	3	7	166
9	Mar. 7	2	—	—	—	—	32	31	—	5	30	6	5	—	—	—	60	3	9	183
10	,, 14	—	—	—	—	—	34	21	—	5	31	5	3	—	—	—	68	4	9	180
11	,, 21	—	—	—	—	—	28	26	—	5	31	6	2	1	—	—	79	2	22	202
12	,, 28	—	—	—	—	—	38	36	—	6	26	8	5	—	—	—	79	—	2	200
13	April 4	2	—	—	—	—	39	29	—	7	27	2	1	—	—	—	77	3	11	198
14	,, 11	1	—	—	—	—	30	35	—	6	37	5	5	1	—	—	72	3	3	198
15	,, 18	—	—	—	—	—	38	39	—	8	31	4	1	—	—	—	40	4	6	171
16	,, 25	1	—	—	—	—	31	26	—	8	32	10	1	—	—	—	39	3	6	157
17	May 2	—	—	—	—	—	29	28	—	13	39	12	3	—	—	—	51	—	10	185
18	,, 9	—	—	—	—	—	27	28	—	9	33	11	5	—	—	—	40	—	10	163
19	,, 16	2	—	—	—	—	27	26	—	6	38	5	2	—	—	—	48	3	7	164
20	,, 23	—	—	—	—	—	37	22	—	5	39	6	1	—	1	—	38	4	7	160
21	,, 30	—	—	—	—	—	35	27	—	4	44	8	1	—	—	—	36	3	3	161
22	June 6	—	—	—	—	—	28	16	—	7	15	6	—	—	—	—	26	3	2	103
23	,, 13	1	—	—	—	1	35	13	—	4	32	6	—	—	—	—	38	1	2	133
24	,, 20	—	—	—	—	—	36	36	—	7	31	10	1	—	—	—	43	4	5	173
25	,, 27	—	—	—	—	—	24	36	—	3	46	10	—	—	—	—	26	3	8	156
26	July 4	—	—	—	—	—	19	41	—	6	39	3	3	—	—	—	25	2	11	149
27	,, 11	—	—	—	—	—	31	49	—	6	27	10	3	—	—	—	28	2	3	159
28	,, 18	—	—	—	—	—	40	45	—	7	38	6	—	—	—	—	50	3	13	202
29	,, 25	—	—	—	—	—	33	47	—	5	32	6	3	—	—	—	26	1	1	154
30	Aug. 1	1	—	1	—	—	41	36	—	2	28	4	4	—	—	—	18	1	10	146
31	,, 8	—	—	—	—	—	17	28	—	5	19	1	—	—	2	—	4	3	4	83
32	,, 15	—	—	—	—	—	18	40		4	20	1	—	—	—	—	17	2	4	106
33	,, 22	—	—	—	—	—	25	25	—	10	26	9	—	—	1	—	22	2	7	127
34	,, 29	—	—	—	—	—	27	37	—	2	29	5	—	—	—	—	25	4	5	134
35	Sept. 5	—	—	—	—	—	24	35	—	9	23	6	2	—	1	—	20	1	3	124
36	,, 12	1	—	—	—	—	35	49	—	6	16	4	1	—	1	—	20	5	9	147
37	,, 19	1	—	—	—	—	37	45	—	8	26	7	2	—	—	—	20	3	4	153
38	,, 26	—	—	3	—	—	42	36	—	11	20	3	2	—	1	—	46	3	3	170
39	Oct. 3	—	—	—	—	—	48	42	—	7	25	4	2	—	1	—	31	2	11	173
40	,, 10	—	—	—	—	—	43	54	—	5	33	11	1	—	—	1	42	8	4	202
41	,, 17	1	—	—	—	—	43	42	—	14	30	3	2	—	—	—	42	5	7	189
42	,, 24	1	—	—	—	—	57	33	—	13	32	7	4	—	—	—	39	1	2	189
43	,, 31	—	—	—	—	—	45	33	—	13	30	7	2	—	—	—	40	1	3	174
44	Nov. 7	—	—	1	—	—	55	28	1	13	25	2	2	1	—	—	38	3	6	175
45	,, 14	1	—	—	—	—	45	27	—	9	21	8	1	—	—	—	24	1	3	140
46	,, 21	1	—	—	—	—	46	36	—	2	17	3	—	—	—	—	36	3	4	148
47	,, 28	—	—	—	—	—	43	35	—	11	16	9	1	2	—	—	36	1	1	155
48	Dec. 5	—	—	1	—	—	33	34	—	9	23	2	3	—	—	—	49	3	5	162
49	,, 12	1	—	—	—	—	30	25	—	10	32	11	—	—	—	—	77	8	6	200
50	,, 19	1	—	—	—	—	52	39	—	6	19	10	1	—	1	—	102	4	4	239
51	,, 26	—	—	—	—	—	36	23	1	11	16	2	1	—	—	—	52	4	3	149
	1926.																			
52	Jan. 2	—	—	—	—	—	38	30	—	14	18	4	2	—	—	—	90	1	10	207
	Total	31	—	6	—	1	1852	1896	3	379	1491	306	92	7	11	1	2185	146	335	8742

TABLE VI.

Cases of Infectious Disease notified during the Year 1925. *Classified according to ages.*

DISEASE.	AGES.																Totals.
	0-	1-	2-	3-	4-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	85-	
Enteric Fever	—	—	—	—	—	1	4	5	5	11	3	2	—	—	—	—	31
Continued Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria	—	—	—	—	—	1	—	—	1	3	1	—	—	—	—	—	6
Trench Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Scarlet Fever	9	34	93	133	175	856	348	104	35	51	11	3	—	—	—	—	1852
Diphtheria	35	89	135	139	150	617	366	131	92	86	37	17	1	—	1	—	1896
Dysentery	—	—	—	—	—	1	1	—	—	—	1	—	—	—	—	—	3
Erysipelas	11	10	5	3	1	10	12	30	13	35	55	83	58	40	10	3	379
Pulmonary Tuberculosis	2	5	3	5	8	81	97	131	186	330	319	202	102	19	1	—	1491
Tuberculous Meningitis	4	6	8	4	3	9	4	2	2	1	—	—	—	—	—	—	43
Tuberculosis of Peritoneum and Intestines	5	7	6	3	1	9	4	8	4	5	1	2	—	—	—	—	55
Tuberculosis of Spinal Column	—	—	2	3	1	4	3	—	1	7	3	5	—	—	—	—	29
Tuberculosis of Joints	—	2	1	2	2	14	5	5	2	5	—	3	1	—	—	—	42
Tuberculosis of Other Organs	—	6	1	3	6	36	19	15	12	10	5	4	1	—	1	—	119
Disseminated Tuberculosis	—	3	—	2	3	5	3	—	—	2	—	—	—	—	—	—	18
Encephalitis Lethargica	2	—	—	2	2	4	9	12	12	13	11	13	6	6	—	—	92
Cerebro-Spinal Fever	2	1	2	—	—	—	—	1	—	1	—	—	—	—	—	—	7
Poliomyelitis	—	3	1	1	2	2	—	1	—	—	1	—	—	—	—	—	11
Polio-encephalitis	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Pneumonia	137	217	100	86	70	256	97	112	102	216	260	223	156	91	51	11	2185
Puerperal Fever	—	—	—	—	—	—	—	6	34	73	33	—	—	—	—	—	146
Ophthalmia Neonatorum	335	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	335
TOTAL	542	383	357	387	424	1906	972	563	501	849	741	557	326	156	64	14	8742

TABLE VII.

Cases of Infectious Diseases notified during the Year 1925. Classified according to Wards.

Causes of Death.	Acock's Green.	All Saints'.	Aston.	Balsall Heath	Duddeston and Nechells	Edgbaston	Erdington (North)	Erdington (South)	Handsworth	Harborne	King's Norton	Ladywood	Lozells	Market Hall	Moseley and King's Heath	Northfield	Rotton Park	St. Bartholomew's	St. Martin's and Deritend	St. Mary's	St. Paul's	Saltley	Sandwell	Selly Oak	Small Heath	Soho	Sparkbrook	Sparkhill	Washwood Heath	Yardley	Not Located	City
Enteric Fever	—	1	4	1	—	—	—	1	3	—	1	—	1	1	1	—	—	3	—	—	1	2	—	2	1	—	—	1	—	—	7	31
Continued Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria...	—	—	—	—	2	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	6
Trench Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Scarlet Fever	61	98	64	77	75	52	48	32	37	32	36	55	93	26	46	11	123	139	60	73	77	77	25	55	35	34	45	36	99	39	92	1852
Diphtheria	46	136	95	68	84	58	18	20	36	25	24	147	83	38	28	12	112	103	115	86	95	56	19	11	32	31	53	27	118	23	97	1896
Dysentery	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	3
Erysipelas	8	12	10	15	23	9	5	6	7	2	1	17	7	5	9	3	17	29	28	17	19	17	8	8	21	4	26	7	11	8	20	379
Pulmonary Tuberculosis	36	48	85	61	101	39	34	21	42	14	25	56	54	35	23	15	68	97	153	80	50	47	20	34	46	33	40	40	56	19	19	1491
Tubercular Meningitis	1	3	1	1	4	—	—	2	—	—	—	3	1	1	2	—	1	—	4	4	3	—	—	3	2	—	2	2	3	—	—	43
Tuberculosis of Peritoneum and Intestines	1	—	—	3	4	1	—	—	—	2	2	—	3	1	1	4	1	6	12	2	1	1	1	2	2	—	1	1	3	—	—	55
Tuberculosis of Spinal Column	1	—	2	—	3	2	2	1	—	—	1	1	—	1	—	—	1	1	1	3	—	1	—	—	—	2	2	1	3	—	—	29
Tuberculosis of Joints	—	3	3	3	4	1	1	—	—	—	—	1	—	—	—	—	2	1	1	3	5	—	—	1	3	—	4	2	2	1	1	42
Tuberculosis of Other ... Organs	2	3	9	6	6	2	2	—	4	2	1	5	6	1	4	1	3	6	15	6	7	5	2	3	2	3	5	—	7	1	—	119
Disseminated Tuberculosis	2	—	—	2	—	—	1	1	1	—	—	—	1	1	—	—	1	1	3	1	—	—	—	1	—	—	1	—	1	—	—	18
Encephalitis Lethargica	1	2	8	—	8	3	5	1	1	—	1	1	10	1	6	2	5	4	4	1	4	2	2	1	4	2	2	4	2	3	2	92
Cerebro-Spinal Fever ...	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	1	—	—	—	1	1	—	—	—	—	—	7
Poliomyelitis	1	—	—	—	1	—	2	—	—	—	1	—	1	—	—	—	—	1	—	—	1	—	1	—	1	—	—	—	1	—	—	11
Polio-encephalitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
Pneumonia	68	154	110	60	112	59	47	20	41	24	23	132	60	36	54	11	131	172	154	145	91	64	24	49	75	40	59	55	38	41	36	2185
Puerperal Fever ...	4	5	3	12	14	3	3	6	3	2	4	9	4	1	4	1	4	3	9	9	4	7	1	3	5	3	4	6	6	2	2	146
Ophthalmia Neonatorum	6	17	12	11	35	3	4	2	4	4	2	12	9	4	3	—	19	40	33	35	21	14	—	4	2	4	11	1	20	1	2	335
Total	240	483	406	320	476	235	172	113	179	107	122	439	333	152	181	60	488	606	594	465	381	294	103	177	232	157	255	183	370	139	280	8742

TABLE VIII.

Temperature of the Air and Ground, Rainfall, Sunshine, and Wind in each Month of the Year 1925.
Observed at the Birmingham and Midland Institute Observatory, Edgbaston,
by Mr. A. J. Kelley.

MONTH.	TEMPERATURE OF THE AIR.						TEMPERATURE OF THE GROUND.		HOURS OF SUNSHINE.		RAINFALL IN INCHES.		DAYS ON WHICH 0.01 INCH OR MORE OF RAIN FELL.	MILES OF WIND.	
	Highest in the Shade.		Lowest in the shade.		Mean for the Month.		Max. at 1 foot deep.	Max. at 4 feet deep.							
	1925.	Above or below the previous highest. *	1925.	Above or below the previous lowest. *	1925.	Above or below the average. *			1925.	Above or below the average. *	1925.	Above or below the average. *		1925.	Above or below the average. *
JAN.	54°	— 4	31°	+ 20	40.7°	+ 2.5	43.6°	46.8°	24	— 10	2.12	+ 0.06	14	10819	+ 401
FEB.	53	— 9	30	+ 22	40.7	+ 1.8	44.3	45.0	52	+ 4	2.96	— 1.23	23	9695	+ 241
MAR.	54	— 16	26	+ 7	40.3	— 0.9	44.0	43.9	50	— 29	1.12	— 1.09	14	9512	— 958
APR.	61	— 18	30	+ 4	44.8	— 0.7	45.5	45.0	109	— 15	2.18	+ 0.45	18	8791	— 710
MAY	68	— 14	34	+ 3	52.6	+ 0.7	54.5	48.7	129	— 35	2.98	+ 0.84	23	8632	— 156
JUNE	83	— 2	42	+ 4	59.5	+ 1.9	62.2	52.2	208	+ 54	0.34	— 1.98	4	7235	—1107
JULY	86	— 6	48	+ 9	62.8	+ 3.6	63.2	55.0	137	— 20	3.20	+ 0.72	13	7872	— 443
AUG.	76	— 18	48	+ 7	60.2	+ 1.0	59.0	54.9	110	— 36	2.97	+ 0.07	16	7108	—1371
SEPT.	68	— 23	40	+ 8	52.8	— 2.8	59.2	54.9	108	— 3	3.80	+ 1.91	17	8524	+ 448
OCT.	68	— 11	34	+ 6	51.2	+ 2.5	55.2	53.0	68	— 8	3.74	+ 1.04	16	8571	— 396
NOV.	58	— 4	27	+ 7	39.0	— 3.6	50.5	51.0	54	+ 9	1.65	— 0.49	14	8413	— 829
DEC.	56	— 1	23	+ 9	36.5	— 3.0	44.0	46.3	37	+ 15	2.45	— 0.36	17	10239	— 359

*In the thirty-eight years 1887-1924.

TABLE IX.

Meteorology and Mortality in each week of the year 1925.

Week.					Deaths from						Temperature						
											of the Air.			of Ground			
No.	Ending. 1925.	Total Deaths.	Deaths under 1 year.	Deaths 65 and up.	Measles.	Whooping Cough.	Diarrhoea and Enteritis under 2.	Pulmonary Tuberculosis.	Other Forms of Tuberculosis.	Respiratory Diseases.	Highest in Shade.	Lowest in Shade.	Mean of Daily Maxima and Minima.	Highest 4 feet Deep.	Horizontal Movement of Air in Miles.	Hours of Sunshine.	Rainfall in Inches.
1	Jan. 10	227	28	72	—	3	6	16	3	47	47°	33°	40°	46.2°	2536	15.9	0.10
2	,, 17	241	35	92	1	6	3	22	7	32	50	31	42	45.8	1723	1.6	0.69
3	,, 24	171	29	58	—	4	3	12	2	35	49	33	40	45.1	1725	5.7	0.06
4	,, 31	243	36	85	1	8	1	22	4	49	52	34	41	45.0	3055	0.5	0.51
5	Feb. 7	198	28	71	1	3	5	27	2	29	51	33	43	44.8	2501	17.5	0.53
6	,, 14	234	41	90	2	10	1	24	1	38	53	32	43	45.0	3434	14.5	0.87
7	,, 21	227	30	83	4	9	3	16	1	35	47	31	38	45.0	1549	10.3	0.29
8	,, 28	241	27	88	1	6	1	16	2	52	46	30	38	44.3	2298	10.1	1.26
9	Mar. 7	273	32	99	3	8	3	18	1	47	51	33	41	43.8	2320	2.6	0.14
10	,, 14	275	28	106	2	9	1	18	5	54	49	28	37	43.8	2677	24.1	0.34
11	,, 21	311	34	121	3	15	1	19	6	69	54	31	44	43.9	1440	4.4	0.22
12	,, 28	310	34	120	1	12	1	19	6	71	48	26	38	43.9	2121	18.6	0.31
13	April 4	318	40	110	3	10	1	34	3	66	52	30	42	43.5	2070	20.3	0.19
14	,, 11	259	27	102	4	10	1	21	—	60	61	36	47	44.0	1496	23.0	0.61
15	,, 18	247	32	76	4	13	2	15	5	41	61	36	46	44.7	2592	24.0	0.71
16	,, 25	241	23	80	8	7	1	22	4	36	56	35	45	44.8	2331	30.1	0.22
17	May 2	207	34	69	9	8	2	21	4	35	53	34	43	45.0	1827	16.9	0.59
18	,, 9	238	33	78	5	9	2	19	4	54	55	40	47	45.0	1957	21.2	1.66
19	,, 16	235	36	88	8	5	2	21	5	31	68	43	54	46.0	1536	31.0	0.02
20	,, 23	200	16	66	10	3	—	20	6	27	68	44	57	47.5	1379	24.0	0.46
21	,, 30	179	13	61	2	2	2	19	4	25	63	46	55	48.6	2717	37.8	0.76
22	June 6	176	20	61	4	4	—	18	5	23	78	42	57	49.0	1858	66.9	0.08
23	,, 13	191	19	55	3	3	2	21	2	26	83	47	65	51.0	1429	53.1	0.01
24	,, 20	155	14	51	3	1	2	19	1	18	80	47	59	52.1	2005	43.9	0.06
25	,, 27	170	20	66	2	3	3	17	4	20	67	45	55	52.1	1935	26.2	0.24
26	July 4	164	17	63	3	2	2	14	4	16	78	49	63	52.6	1746	42.9	0.17
27	,, 11	184	23	64	3	1	1	12	3	22	74	49	60	53.0	1931	23.1	0.18
28	,, 18	164	29	54	—	10	1	15	—	24	82	52	66	53.7	1423	45.0	0.11
29	,, 25	174	14	50	3	2	—	15	3	27	86	49	67	54.5	1593	31.2	2.21
30	Aug. 1	159	21	44	2	4	7	17	—	16	68	48	58	55.0	1872	28.1	0.76
31	,, 8	149	24	45	—	3	4	14	3	19	72	48	59	54.7	1624	20.7	0.93
32	,, 15	147	16	44	—	2	8	17	1	14	71	49	61	54.5	1814	21.5	0.85
33	,, 22	173	34	55	2	3	12	16	2	10	76	50	60	54.9	1157	25.8	0.65
34	,, 29	181	41	55	2	3	12	8	—	22	73	48	60	54.9	1795	28.6	0.30
35	Sept. 5	164	31	46	—	1	14	16	3	13	76	43	56	54.9	2197	25.9	0.46
36	,, 12	185	28	64	1	4	11	19	1	16	61	40	52	54.7	2007	24.7	0.46
37	,, 19	198	37	54	1	—	16	17	4	16	65	40	54	53.8	1586	39.4	1.65
38	,, 26	183	14	57	—	1	7	19	1	25	58	43	51	53.1	2331	21.8	1.22
39	Oct. 3	184	25	61	—	—	3	5	4	37	68	44	56	52.5	1370	19.1	0.01
40	,, 10	167	28	52	—	—	6	13	5	25	68	38	53	53.0	1167	14.2	0.02
41	,, 17	196	16	80	1	2	3	15	2	16	64	34	46	53.0	1785	13.3	0.64
42	,, 24	206	30	68	—	1	9	12	—	33	63	41	52	51.8	2630	11.0	2.45
43	,, 31	145	17	50	—	—	1	9	2	28	59	39	51	51.2	2527	15.8	0.62
44	Nov. 7	196	19	78	—	—	4	17	3	34	58	41	49	51.0	2127	13.8	1.20
45	,, 14	181	12	59	1	—	2	21	4	23	45	29	36	51.0	1766	13.1	0.02
46	,, 21	213	20	77	—	1	4	18	3	38	46	30	37	49.1	1664	11.0	0.01
47	,, 28	228	28	87	1	4	4	21	5	39	45	27	35	47.8	2185	12.9	0.06
48	Dec. 5	276	34	105	2	—	6	27	4	56	39	23	32	46.8	1850	12.8	0.26
49	,, 12	310	34	130	—	2	5	27	1	92	51	24	38	45.4	2314	8.2	0.36
50	,, 19	272	23	123	3	2	4	14	3	59	45	26	35	44.9	1867	3.4	0.44
51	,, 26	224	18	91	—	2	1	13	3	55	44	27	33	44.2	2089	11.6	1.04
52	1926. Jan. 2	312	47	110	—	1	5	23	2	77	56	35	46	43.9	3366	3.6	1.28